Atlantic Richfield Company

Thomas G. Tunnicliff
Environmental Business Manager



301 Evans Avenue P.O. Box 167 Wood River, IL 62095-0167 Direct (618) 254-9074 Fax (618) 254-8718 tunnictg@bp.com

December 12, 2011

Subject:

Notice of Modifications to the RCRA Part B Permit BP Products North America Inc. – Main Plant Property IEPA ID Number 1191150001 – Madison County

US EPA ID Number ILD980700967 RCRA Permit, Log No. B-147R

This is to inform you that BP Products North America Inc. (BP) will submit one document to the Illinois Environmental Protection Agency (Illinois EPA) to request modifications to Section IV, Corrective Action, of the RCRA Part B Permit (Log No. B-147R) on December 19, 2011. The Illinois EPA has requested BP submit the proposed procedures to be used in: (1) the parceling effort; and (2) removing a given parcel from the terms and conditions of the permit.

Public Notice

BP will be requesting a Class 3 Permit Modification of the RCRA Part B Permit for the former BP Amoco Wood River Refinery (Main Plant Property). The contents of this request include:

- The procedures to be used for parceling of the BP Main Plant facility and for removing a parcel from the terms and conditions of the Permit;
- A request to remove the parcel being donated to the City of Wood River from the Permit; and
- Updates to Section IV of the Permit: Corrective Action.

The RCRA Part B Permit (Log No. B-147R) for the site was issued by the Illinois EPA on March 4, 2011. Pursuant to 35 Ill. Adm. Code 703.283(b), a notice of modifications shall be sent to everyone identified on the facility mailing list.

60-Day Comment Period

Commencing on the date of this notice, a 60-day comment period is in effect regarding the above-referenced Permit Modification Request, in accordance with 35 IAC 703.283(e). The name and address of the Agency contact to which comments must be submitted are provided below.

Agency Contact

The permittee's compliance history during the life of the permit being modified is available from the Agency contact person. The Agency contact person is Ms. Mara McGinnis, Public Involvement Coordinator, who can be reached at:

Atlantic Richfield Company

Notice of Modifications to the RCRA Part B Permit

December 12, 2011

Page 2 of 2

Illinois EPA Office of Community Relations 1021 N. Grand Avenue East P.O. Box 19276 Springfield, IL 62794-9276 (217) 524-3288

Public Meeting

A public meeting to be staffed by BP personnel will be held on Wednesday morning January 11, 2012, (10:30 a.m.) at the Roundhouse, 633 North Wood River Avenue, Wood River, Illinois.

Local Repository

Appropriate records, including copies of the RCRA Part B Permit (Log No. B-147R), figures showing the current and proposed parceling of the Main Plant property and the Request for Class 3 Permit Modification, are available throughout the 60-day comment period at the Wood River Public Library, 326 E. Ferguson Avenue, Wood River, Illinois.

Site Contact

The BP site contact is Mr. Tom Tunnicliff, Operations Project Manager, who can be reached at:

BP Products North America Inc. 301 Evans Avenue Post Office Box 167 Wood River, Illinois 62095 (618) 254-9074 1) post-closure Dortions
2) Corrective Action

Draft – January 23, 2006

Section Post Closure

E. Notices, Land Use Restrictions and Certification

3. (a) Within 60 days of the effective date of this permit, permittee shall prepare a map and legal description (via survey) for the following areas at the facility that require restrictions:

Hazardous waste disposal units and other areas that require restrictions	Land and Groundwater Use Restrictions
Soil areas that exceed residential cleanup standards	Prohibition of residential and/or 24 hour occupancy use of the property, unless a risk assessment demonstrates to the Agencies satisfaction that a proposed use will not increase the potential hazard to human health and the environment.
Areas of groundwater contamination that exceed groundwater protection standards	Prohibition of groundwater use and installation of groundwater wells unless such use is set forth in a work plan and is approved in writing by the Agencies
Remedy & Monitoring Components: Final Soil Covers, Groundwater treatment and containment system, groundwater monitoring system and other components of a containment system or facility monitoring system	Prohibition of any action that would interfere with or adversely affect remedy components such as the final soil covers, groundwater treatment and containment system, groundwater monitoring systems unless such use is set forth in a work plan approved in writing by the Agencies

The surveys must be prepared and certified by an independent professional registered land surveyor.

(b) Within 90 days of the effective date of this permit, permittee shall submit to Illinois EPA and U.S. EPA for review and approval a draft Declaration of Land and Groundwater Restrictions (and attendant surveys) that provides notice of the land and groundwater use restrictions applicable to each of the areas in 3(a) After U.S. EPA and the Illinois EPA, approves the draft Declaration, permittee shall record the Declaration and surveys of the restricted areas, with the Recorder of Deeds ____ County, State of Illinois.

(c)If permitee conveys any interest in the facility, or any portion thereof including, but not limited

to, fee interests, leasehold interest, and mortgage interest, permittee shall reserve an environmental easement and restrictive covenants, running with the land in the conveyance instrument that (i) reserves the right of access for the purpose of conducting any activity related to this permit, and/(ii) reserves the right to enforce the land/water use restrictions listed in 3(a) above. Permittee shall reserve the access right and the right to enforce the land/water use restrictions for (D) Permittee, (ii) the U.S. EPA, and its representatives, as a third party beneficiary, and (iii) the Illinois EPA, and its representatives, as a third party beneficiary. At least 45 days prior to the conveyance of any interest in property located within the Facility. permittee shall submit to U.S. EPA and the State for review and approval with respect to such conveyance: a) a draft Deed with Reservation of Environmental Easement and Declaration of Restrictive Covenants that reserves the environmental easiement/restrictive covenants; b) a current title insurance commitment or some other evidence of title acceptable to U.S. EPA and the State, which shows title to the land described in the Deed to be free and clear of all prior liens and encumbrances (except when those liens or encumbrances are approved by U.S. EPA and the State or when, despite best efforts, permittee is unable to obtain release or subordination of such prior liens or encumbrances. Afte U.S. EPA and the Illinois EPA, approve and accept the draft Deed (or other instrument of conveyance, including any lease) and the title evidence, permittee may convey the interest in property pursuant to the approved Deed.

Corrective Action Program

D. 3. The Permittee shall conduct a corrective action program to remove or treat in place any hazardous constituents that exceed concentration limits in groundwater between the compliance point and the downgradient facility property line. Permittee shall implement an interim institutional control plan to prohibit use of groundwater that exceeds groundwater protection standards until groundwater protection standards are achieved.

12/13/08 meetig iof fan Carlson

E. Notices and Certification

- 3. Within 60 days of the effective date of this permit, the permittee shall record, in accordance with Illinois law, a notice of land use restrictions; and if the permittee conveys any interest in the facility, or any portion thereof, permittee shall reserve an environmental easement and restrictive covenant, running with the land that:
 - Provides notification to any potential purchaser of the property that the land has been used to manage hazardous wastes; and notify the resolutions?
 - (ii) Prohibits disturbance of the integrity of the final cover, liners, or any other components of the containment system or the function of the facility's monitoring systems [other site specific prohibitions????industrial use??? in accordance with 35 IAC 724.217 c;
 - (iii) Includes a survey plot of the restricted areas including the boundaries of hazardous waste disposal units, final cover, liners and other components of the containment system and monitoring/systems, areas that support industrial use only???? This survey must be prepared and certified by an independent professional registered land surveyor;
 - (iv) Submit a copy of the notice and deed with reservation of environmental easement and restrictive covenant.

(v)
property Right.

2

* Next Toursey

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Mark Crites <Mark.Crites@epa.state.il.us To

Subject Re: Amoco

12/09/2005 03:36 PM

History:

This message has been forwarded.

I am a little confused. Are you talking about the deed restriction provision in Section III.E.3 of the Riverfront permit, and Section I.E.3 of the Main Plant permit? Do you feel there is some flaw with the standard language?

Mark L. Crites

217/524-3269 mark.crites@epa.state.il.us

>>> <Lee.Jae@epamail.epa.gov> 12/6/2005 9:55 AM >>> Mark: We are in the process of formatting deed restriction language which we would like to include in the permit. I think most of issues we've raised would be taken care of, except deed restriction issue. There are another similar cases for this issue and we would like to draft a language which would be consistent with our Region's deed restriction approach.

Please go ahead with your schedule to finish the permit write-up. Once

we finish our language we will let know and we can discuss how best the

language can be included in the permit. Please let us know when can you complete your write-up of the draft permit. We will try to adjust ourselves to meet your schedule. thank you

Mark Crites

<Mark.Crites@epa

.state.il.us>

То

12/02/2005 10:27

James Blough/R5/USEPA/US@EPA, Jae

AM

Lee/R5/USEPA/US@EPA

CC

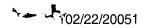
Subject

Amoco

Just checking to see the status of the review of the renewal applications.

Mark L. Crites

217/524-3269 mark.crites@epa.state.il.us





James Blough /R5/USEPA/US

02/16/2005 03:49 PM

Subject Fw: Amoco Renewals * U.S. EPA Assistance

---- Forwarded by James Blough/R5/USEPA/US on 02/16/2005 03:48 PM -----



Steve Nightingale <Steve.Nightingale@epa .stat e.il.us>

To

To

Subject Amoco Renewals * U.S. EPA Assistance

02/16/2005 02:16 PM

Jim:

I guess I am a bit confused on the current U.S. EPA review activities on the renewal process for the above referenced post closure care permits. After reviewing the attached emails between you and Mark Crites it would appear you have expanded your review to include corrective action. I don't think this was agreed to in any of the meetings/conference calls I attended.

I would like to bring your attention to a work outline I sent Harriet Croke back on August 26,2003. I thought this outline defined each of our responsibilities.

My biggest concern is that we end up having two people doing the same work. That is why the work plan in the memo was provided.

Please let me know if you have a different understanding to the agreed upon work plan.

Thanks,

Steve Nightingale

----- Message from "Mark Crites" <Mark.Crites@epa.state.il.us> on Tue, 15 Feb 2005 16:21:17 -0600 -----

To: "Steve Nightingale" <Steve.Nightingale@epa.state.il.us>

Subject: Fwd: Re: Amoco Permits

Read from bottom to top to get it in order. Basically, they are going back into the corrective action issues.

Mark L. Crites

217/524-3269

mark.crites@epa.state.il.us

---- Message from Blough.James@epamail.epa.gov on Wed, 02 Feb 2005 13:47:25 -0600 ----

To: Mark Crites < Mark. Crites@epa.state.il.us>

cc: Lee.Jae@epamail.epa.gov

Subject: Re: Amoco Permits

Mark

BP was going to send us how they were going to deal with the Deed restrictions and a schedule for their clean up and they talked about update some of the their permit application, for example what is the

current status of permit modification approval of North Cell spray pond. Thanks

Mark Crites
<Mark.Crites@epa
.state.il.us>

02/02/2005 10:35 AM

James Blough/R5/USEPA/US@EPA

To To

CC

bcc

Fax to

Subject

Re: Amoco Permits

Refresh my memory. What information are you waiting for?

Mark L. Crites

217/524-3269 mark.crites@epa.state.il.us

>>> <Blough.James@epamail.epa.gov> 02/02/05 9:36 AM >>> I just talked Jay and since the last phone call we had serval months ago

(with, you, Jim Moore, Terry and BP) we have not received or heard anything from you or BP please let us know if you have any additional information so we can do the finial review.

Thanks

<Mark.Crites@epa

.state.il.us>

То

02/02/2005 08:53

ОТ

AM

James Blough/R5/USEPA/US@EPA

CC

bcc

Fax to

Subject

Amoco Permits

Hi. Where do we stand as far as issuing renewal permits? Do you have a projected timeframe for having something to us?

Mark L. Crites



BP/IEPA Meeting Agenda Part B Permit Issues **BP Former Wood River Refinery Site** Wednesday, August 25, 2004, 2:00 PM

Objective:

To discuss the status of Agency reviews of the BP Wood River Part B Permit related submittals for the Main Plant and Riverfront

Participants: IEPA

USEPA

BP – Greg Jevyak, Jim Brossman

URS - Ryan Hartley, John Dennison, Larry Verkoulen

8

Safety Minute

Status of Permit Renewals Review

- **IEPA Reviews**
- **USEPA** Reviews

Permit Related Issues

Potential for streamlining process

ask about permit

Pond 1 Leachate De-listing Petition - Riverfront

Modification (current permit) for Closure by Removal of the North Cell of Spray Pond 1 - Main Plant

South Flare Pit Corrective Action Complete with Controls – Main Plant

Action Items

BP $\sqrt{}$

IEPA >

USEPA >

A monitif wells.

See What are the issues

Next Meeting

Part B replewal

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MX. Not completed review get review of the mod. Process

Jollow Hollow

Respond red line

2)

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March 22, 2004

Ms. Joyce L. Munie, P.E.

Illinois Environmental Protection Agency

Bureau of Land - #33

Permit Section

1021 North Grand Avenue East

Springfield, Illinois 62702

Subject:

Summary of Part B Permit Meeting and Site Visit

1191150001 - Madison County

BP Products North America Inc., Former Wood River Refinery

Log No. B-147

Dear Ms. Munie:

BP Products North America Inc. (BP) and URS Corporation (URS) would like to thank representatives of the Illinois Environmental Protection Agency (Illinois EPA) and the United States Environmental Protection Agency (USEPA) for attending the site visit at the BP Former Wood River Refinery in Wood River, Illinois on February 25, 2004.

The Illinois EPA and the USEPA are working together to complete review of the RCRA Part B Permit Renewal Applications for the BP Wood River Main Plant and Riverfront facilities. The purpose of the site visit was for representatives of both agencies to see the hazardous waste units, to observe current site conditions including corrective action being conducted, and to discuss the land reuse plan for the BP Main Plant and Riverfront facilities. BP and URS gave a presentation regarding site history and the land reuse plan. The schedule was set for Agency completion of review of the permit renewal applications and review of the "Class 3 Permit Modification for Closure By Removal for the North Cell Of Spray Pond 1." The parties then toured the Main Plant facility and the Riverfront facility.

The following people were present at the BP Wood River site visit:

Mark Crites, IEPA RCRA Unit
Steve Nightingale, IEPA RCRA Unit Manager
Gina Search, IEPA Collinsville Field Office
Ryan Bennett, IEPA RCRA Groundwater Assistance Unit
Amy Boley, IEPA RCRA Groundwater Assistance Unit
Krishnamurthi Gadi, IEPA Disposal Alternatives Unit

URS Corporation 122 South Michigan Avenue, Suite 1920 Chicago, IL 60603 Tel: 312.939.1000

Fax: 312.939.4198

My Street



Jim Blough, USEPA Region V
Jae Lee, USEPA Region V
Greg Jevyak, BP
Jim Brossman, BP
Ryan Hartley, URS
Dan Banaszek, URS
Larry Verkoulen, URS

Following is a summary of the roles, responsibilities, and schedule for review of the Part B Permit Renewals, and for review of the Class 3 Permit Modification.

Review of Part B Renewal Applications

The Illinois EPA and the USEPA Region V Permit section are working together to review the Part B Permit Renewal Applications for the Main Plant and Riverfront facilities. Jim Blough of USEPA will review the Riverfront Permit Renewal, and Jae Lee of USEPA will review the Main Plant Permit Renewal. Mark Crites of Illinois EPA will coordinate the USEPA reviews, and will provide guidance to the USEPA. The Illinois EPA will issue comments and approval letters for the Permit Renewals, as well as issue the new permits. The Illinois EPA stated that completing review of the BP Wood River permit renewals is one of their top priorities. The Illinois EPA also stated that their goal is to issue the initial comment letters for the respective renewals in the next one to two months.

Review of Permit Modification for North Cell of Spray Pond 1 Closure by Removal

The North Cell of Spray Pond 1 was a hazardous waste unit located at the BP Main Plant, and is identified in the current Part B Permit for the Main Plant. This unit was closed by removal in 2001, and a Class 3 Permit Modification was submitted to the Illinois EPA in 2002. The permit modification requested to remove the closed unit from Part B Permit. BP has not included this closed unit in the Part B Permit renewal for the Main Plant facility. The Illinois EPA stated that they would attempt to complete review of the permit modification in the next one to two months. The Illinois EPA also stated that they plan to complete review of the permit modification at the same time that the USEPA completes review of the permit renewals in order to have one public notice for these submittals. The Illinois EPA stated that if review of the Part B Permit Renewals were not complete in approximately two months, they would issue a separate response for the permit modification.

A what senting apply is responsible of? Just while seeking gw. portion,
Jew Nestriction



Mr. Mark Crites - IEPA March 22, 2004 Page 3

If you have any questions, please contact me at 312/697-7224, or Ryan Hartley at 312/697-7269.

Sincerely,

Laurence Verkoulen

Project Environmental Scientist

Ryan Hartley, P.E. Project Manager

cc:

Greg Jevyak, GEM Company
Jim Brossman, BP
Mark Crites, Illinois EPA
Steve Nightingale, IEPA RCRA Unit Manager
Ryan Bennett, IEPA RCRA Groundwater Assistance Unit
Amy Boley, IEPA RCRA Groundwater Assistance Unit
Jim Blough, USEPA Region V
Jae Lee, USEPA Region V

meeting 11:00AM (3EPA 41GPA) 3/3/05 /EPA D'Overlap Second opini → acress contino oversching * 9.W deed Restriction > ressay for the wind. I Schedule, of perinil. I more 1997.

7 q.w. monitis (Ciability) Tq.w. monitaj. 1 U.S. EPA > input to 1EPA (Work Summay) & G.W.) addressed. G.W.) With there Industral Commend Come permit Schedule: Comple weeks (clean closed) I)

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Removal. > port down permit.

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Proposed Agenda Part B Permit Applications Site Visit USEPA and IEPA

BP Former Wood River Refinery Wednesday, February 25, 2004, 10:30 AM

10:30-11:00 Safety Orientation and Lunch

11:00-11:30 Brief Overview of Part B Permits Background

11:30-11:45 Discussion of Agency Reviews for Permit Reapplications and Associated Reports

- USEPA and IEPA roles for review of Part B Reapplications
- USEPA and IEPA roles for review of Permit Modification for North Cell of Spray Pond 1 Closure by Removal
- Agency goals for completion of Permit Renewal Process

11:45-1:00 Main Plant Tour*

1:00-2:00 Riverfront Tour*

*Please note that work boots and safety glasses are required for the site tour. Additional safety glasses will be available.

C:\WINDOWS\TEMPORARY INTERNET FILES\OLKE315\PART B PMT APPS SITE VISIT PROPOSED AGENDA.DOC 02-24-04

(wrent pend.)
Nov. 4.2003

expend, bit effective





ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 IAMES R. THOMPSON CENTER, 100 WEST RANDOLPH, SUITE 11-300, CHICAGO, IL 60601

ROD R. BLAGOJEVICH, GOVERNOR

RENEE CIPRIANO, DIRECTOR

217/524-3300

November 7, 2003

BP Products of North America Inc. Attn: Stephen A. Elbert, President Group Environmental Management Company 801 Warrenville Road, Suite 800 Lisle, Illinois 60532

ECEIVED

CERTIFIED MAIL

NOV 2 5 2003

Technical Support and Permits Section Waste Management Branch

7002 3150 0000 1219 9305

Re:

1191150001 -- Madison County

Waste, Pesticides and Toxics Division BP Products of North America Inc., former Wood River Refine For Manuella Inc.,

ILD980700967

RCRA Permit Log No. B-147R

Dear Mr. Elbert:

The Illinois Environmental Protection Agency has reviewed the RCRA Part B Post-Closure Permit application for a closed disposal unit identified as the South Flare Pit at the above referenced facility. This application consists of three volumes dated May 8, 2003, and received by Illinois EPA on May 9, 2003; as well as an additional volume containing additions and corrections dated September 8, 2003, and received by Illinois EPA on September 9, 2003. The Agency has determined that the RCRA Part B Post-Closure Permit application is administratively complete in accordance with 35 IAC 705.122. The Agency will now begin a comprehensive technical review to assure the facility's conformance with the requirements of 35 IAC Parts 703 and 724. Additional information may be requested by the Agency in accordance with 35 IAC 705.122(f).

Note that currently a closure by removal determination for another unit at this site identified as the North Cell of Spray Pond 1 is currently under Illinois EPA review. If closure by removal for this unit is not approved, then the permittee will be required to submit additional information relating to renewal of the post-closure permit with respect to that unit.

If you have any questions regarding this matter, please contact Mark L. Crites at 217/524-3269.

Sincerely

Joyce L. Muhie, P.E. Manager, Permit Section

Bureau of Land

JLM:MLC:bjh\03561s.doc

cc:

USEPA Region V – Jim Blough Dennis Kasner, URS Corporation



XC

September 8, 2003

Ms Joyce L. Munie, P.E.
Illinois Environmental Protection Agency
Bureau of Land -- #33
Permit Section
1021 North Grand Avenue East
P.O. Box 19276
Springfield, Illinois 62794-9276

Subject:

Response to Initial Completeness Review

Notice of Deficiency

BP Products North America Inc. Former Wood River Refinery

Main Plant Property

IEPA ID Number 1191150001

Log Number B-147R

Dear Ms. Munie:

URS Corporation, on behalf of BP Products North America Inc. (BP), hereby submits an original and three (3) copies of a response to the Illinois Environmental Protection Agency's Initial Completeness Review Notice of Deficiency dated July 8, 2003. The Notice of Deficiency pertained to the BP Products North America Inc. Former Wood River Refinery RCRA Part B Permit Application for the South Flare Pit (Permit Application). The Permit Application submittal was dated May 8, 2003.

The revised pages and additions to the Permit Application are provided in Attachment 1, and the revisions are highlighted. A cross-reference table identifying the location of the responses to the Illinois EPA's comments is also provided in Attachment 1.

The documentation of public notices of repositories for the Part B Permit Application is provided in Attachment 2.

"Documentation of Permit Application Notice" (Section A.4.2.2 of the Permit Application) was not identified as deficient in the Main Plant Initial Completeness Review; however, the documentation of permit application notice was completed, and is provided in Attachment 3. Section A.4.2 has been revised accordingly and is provided in Attachment 1.

URS Corporation 122 South Michigan Avenue, Suite 1920 Chicago, IL 60603 Tel: 312.939.1000

Fax: 312.939.4198

URS

Ms. Joyce L. Munie, P.E. Illinois Environmental Protection Agency September 8, 2003 Page 2

A change has also been made to Section B.1.3, "Units" of the Permit Application. This section discusses the wastes previously managed at the SFP, the regulated unit. A revised page B-2 is provided in Attachment 1.

Additionally, a revised Facility Mailing List is provided in Attachment 1 and should replace Exhibit A-3 of Volume 1 of the Permit Application.

If you have any questions regarding this submittal, please contact me at 312-697-7215.

Sincerely,

Dennis Kasner Project Manager Frederick W. Johnson Principal-in-Charge

Enclosures

cc:

G. Jevyak, BP

J. Brossman, BP

J. McClain, BP

Date: September 2003

Certification

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons that manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Signature:

BP Products North America Inc.

Show A. Ec Cot

Date:

8-27-03

ATTACHMENT 1

REVISIONS
INITIAL COMPLETENESS REVIEW
PART B PERMIT APPLICATION
FOR BP FORMER WOOD RIVER REFINERY
MAIN PLANT PROPERTY

The state of the state of	100 S 100 100 to 200 to 20	
Deficiency No	Bejidency Name:	Location of BP Responses.
	Technical	
	Information	Text revised in Volume 1, Page A-1. Certification to
A.2.3	Certification	be added to Volume 1, Exhibit A-2
		Section A.4.2, "Notice of Permit Application
	Notice of Permit	Submittal" has been completed, and is included in
Not Applicable	Application Submittal	Volume 1, Pages A-3 and A-4
	Documentation of	
	Public Notices of	Attachment 1 to the response letter to the "Initial
A.4.1.4	Repositories	Completeness Review NOD"
		Section B.1.3, "Units", has been modified; see
Not Applicable	Units	Volume 1, Page B-2
	Contents of	
B.5.1	Operating Records	Volume 1, Page B- 8
	Equipment	
F.3	Requirements	Volume 1, Page F-5
F.3.1	Waiver	Volume 1, Page F-5
	Internal	
F.3.2	Communications	Volume 1, Page F-5
	External	
F.3.3	Communications	Volume 1, Page F-5
	Water for Fire	
F.3.4	Control	Volume 1, Page F-5
-	Testing and	
	Maintenance of	
	Emergency	Volume 1, Page F-5
F.3.5	Equipment	
- 0 - 4		
F.3.5.1	Equipment Testing	Volume 1, Page F-5
E 2 E 2	Cab a dula)
F.3.5.2	Schedule	Volume 1, Page F-6
F.3.6	Aisle Space	Volume 1 Page F-6
1.0.0	Evaluation-	Volume 1, Page F-6
	Assessment of	
	Potential Hazard	
G.1	Report	Volume 1, Page G-1
G.2	Contingency Plan	Volume 1, Page G-1
G.2.1.1	General Description	Volume 1, Page G-1

G.2.1.2	Deficiency Name Facility Drawing	Volume 1, Page G-1
G.2.1.3	Waste Types	Volume 1, Page G-2
0.2.1.0	Surrounding Land	Volume 1,1 age 0-2
G.2.1.4	Uses	Volume 1, Page G-2
G.2.1.5	Possible Hazards	Volume 1, Page G-2
	Availability and	
	Responsibility of	
	Emergency	Volume 1, Page G-2
G.2.2.2	Coordinator	
	Authority to Commit	Volume 1, Page G-2
G.2.2.3	Resources	Volume 1, Fage 0-2
G.2.3	Assessment	Volume 1, Pege C 2
G.2.3	Assessment	Volume 1, Page G-2
G.2.3.1	Off-Site Impact	Volume 1, Page G-2
	Evacuation	
G.2.3.2	Determination	Volume 1, Page G-2
	Emergency	1/4
G.2.5	Response Procedures	Volume 1, Page G-3
0.2.5	Identification of	
G.2.5.1	Materials Released	Volume 1, Page G-3
G.2.6	Control Procedures	Volume 1, Page G-3
	Prevention of	
	Recurrence or	
	Spread of Fires, Explosions, or	
G.2.6.1	Releases	Volume 1, Page G-3
		1,1 290 0 0
G.2.7	Evacuation Plan	Volume 1, Page G-3
G.2.7.2	Excavation Routes	Volume 1, Page G-3
	Post-Emergency	
G.2.8	Actions	Volume 1, Page G-3
	Storage and	
	Treatment of	Volume 1, Page G-3
G.2.8.1	Released Material	

G.2.8.2 Management of Incompatible Waste Volume 1, Page G-3 Post-Emergency Equipment Maintenance Reporting G.2.9 Requirements Volume 1, Page G-4 Post-Emergency Response Actions Volume 1, Page G-4 Post-Emergency Response Actions Volume 1, Page G-4 Note in the Operating Record Volume 1, Page G-4 G.2.9.2 Operating Record Volume 1, Page G-4 G.2.9.3 Written Report Coordination Agreement Volume 1, Page G-4 G.2.10 Requirements Documentation of Agreements & Coordination Agreement Volume 1, Page G-4 G.2.10.1 Agrangements Volume 1, Page G-4 G.2.10.2 Agreements Volume 1, Page G-4 G.2.10.3 Facility Operations Familiarize Local Hospitals Volume 1, Page G-4 H.1 Training Program Volume 1, Page H-1 Post-Closure Maintenance Plan Procedures, Equipment & Volume 1, Page I-3 Procedures, Equipment & Volume 1, Page I-3 L.2.4.1 Materials Volume 1, Page I-3 L.2.4.2 Rationale Volume 1, Page I-5 Existing Facilities with Closed Disposal			
Management of Incompatible Waste Volume 1, Page G-3			
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PART B PERMIT APPLICATION
FOR BP FORMER WOOD RIVER REFINERY
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Volume 2 Post-Closure Plan for the South Flare Pit

Volume 3 Groundwater Monitoring Plan

SECTION A – FORMS, CERTIFICATIONS, CONFIDENTIALITY, & PUBLIC INVOLVEMENT

This RCRA Part B Permit Application (Application) for the BP Main Plant has been developed to demonstrate compliance with relevant portions of Title 35 of the Illinois Administrative Code (IAC) and the Illinois Environmental Protection Act, the applicable sections of which are listed after each subpart heading (e.g., 702.121 below is a reference to 35IAC Section 702.121).

A.1 Forms and Permits

A.1.1 RCRA Part A Application: 702.121, 702.123, 702.126(a) and (d), 703.181

The completed, signed RCRA Part A Application is attached as Exhibit A-1.

A.1.2 Permits or Construction Approvals: 702.123

A list of all relevant environmental permits is provided in the RCRA Part A Application (Item X in Exhibit A-1).

- A.2 Certifications: 703.182
- A.2.1 <u>Siting Certification:</u> 703.184(f), Sections 39(c) and 39.2 of the Environmental Protection Act.

This section is not applicable to the SFP because it is not a new pollution control facility.

- A.2.2 <u>Facility Certification:</u>702.121, 703.182, 702.126 The certification for the Part B Permit Application is provided in Exhibit A-2.
- A.2.3 <u>Technical Information Certification:</u> 703.182, Illinois Professional Engineering Act.

The Technical Information Certification for this Permit Application is provided in Exhibit A-2.

- A.2.4 <u>Prior Conduct Certification:</u>Section 39(i) Environmental Protection Act BP's completed and signed original Prior Conduct Certification Evaluation is provided in Exhibit A-2.
- A.3 <u>Public Disclosure Exemption Claims and Trade Secret Claims:</u> 2 IAC 1828, 35 IAC 120, Section 7 of the Act.

- A statement that hazardous waste permit application materials have been prepared and are available for community members to review and copy at the repository location.
- The location and business hours of the repository.
- A statement that the applicant will update the repository materials periodically during the Illinois EPA's review of the permit application.
- The name, address and telephone number of the applicant's contact person to address questions regarding the application or to be added to the facility's mailing list for future permit activities.
- A statement "For general information on the hazardous waste management permit program in Illinois, please contact" then provide the address of the RCRA Public Involvement Coordinator, Illinois EPA.

A.4.1.4 <u>Documentation of Public Notices of Repositories:</u>

BP will provide documentation that the public notices of the repositories were completed. The notices will be made no later than the date the permit application is submitted to the Illinois EPA. The documentation will include:

- A copy of the letter sent to all individuals on the facility mailing list. The date
 the letter was sent and the revision date of the mailing list will be documented.
 The individuals on the mailing list will be notified that the information repository
 will be updated periodically in the future.
- The publisher's certification stating that it published the notice as a display ad once per week for three consecutive weeks; or tear sheets containing the display ad for each date the ad ran.

A.4.2 Notification of Permit Application Submittal: 703.192, 705.163 (a)(5)

A.4.2.1 Content of Permit Application Notice:

- The notice of the permit application submittal will include the following information:
- A statement that hazardous waste management permit application was submitted to the IEPA
- The date the application was submitted
- A brief description of the facility and proposed operations, including the address or a map of the facility location on the front page of the notice
- The location of the information repository where copies of the permit application and any supporting documents can be viewed and copied

- The name, telephone number, and address of the applicant's contact person to whom people can write to be placed on the facility mailing list
- The mailing address of the RCRA Public Involvement Coordinator in the IEPA Bureau of Land to whom inquiries can be directed throughout the review process
- The name and telephone number of the appropriate IEPA regional office

A.4.2.2 Documentation of Permit Application Notice:

Within 30 days of submitting the permit application to the IEPA, BP will provide documentation that notice of the submittal was provided to any unit of local government that has jurisdiction over the area where the facility is located, and each State Agency that has any authority under State law with respect to the construction or operation of the facility.

- Provide one copy of the letter sent to each local and state agency
- Provide a list of the contact names, agencies, and their addresses, that received the notice

A.4.3 <u>Pre-Application Meeting:</u> (35 IAC 703.183 (v), 703.191, 703.192) The requirements of this section do not apply to applications that are submitted for the sole purpose of conducting post-closure or corrective action at a facility. BP is

currently conducting post-closure care at the Main Plant; therefore, this section does not apply.

Professional Engineering Certification Statement

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system design to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Signature:

Damies, Banastok

Daniel J. Banaszek,

Licensed Professional Engineer

URS Corporation

Date:

Spt 8, 2003

Professional's Seal:





FORMER BP - WOOD RIVER REFINERY WOOD RIVER, ILLINOIS MAILING LIST September 4, 2003

* Denotes State Agency that has authority under State law with respect to the construction or operation of the facility, or unit of local government with jurisdiction over the area where the facility is located.

United States Congress

Representative Jerry Costello 2454 Rayburn House Office Building

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District Office: Belleville

Or, 327 W. Main

Belleville, Illinois 62220

202/225-5661 (Phone) 202/225-0285 (Fax)

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Senator Richard Durbin 364 Russell Senate Office Building

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District Office: Chicago

Or, 230 S. Dearborn, Suite 3892 Chicago, Illinois 60604

Senator Peter Fitzgerald
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Washington, DC 20510

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http://www.legis.state.il.us/Senate/Senator.asp?MemberID=874

Illinois State Representative

* Representative Steve Davis

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Illinois Office of Attorney General

* Illinois Office of Attorney General 217/782-1090 (Phone)
Environmental Law Division
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Springfield, Illinois 62706

* Illinois Office of Attorney General Environmental Enforcement Division West Randolph, Suite 12 Chicago, Illinois 60601

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* Mr. Alan Dunstan 618/296-4341 (Phone) 157 North Main Street, Ste. 165 Edwardsville, Illinois 62025

Madison County State's Attorney

* Mr. William Mudge 618/296-5381 (Phone) 157 N. Main Street, Ste. 402 Edwardsville, Illinois 62025

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Waste, Pesticides and Toxics Division

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Briana Bill, P-19J U.S. EPA - Region V Office of Public Affairs 77 West Jackson Boulevard Chicago, Illinois 60604

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* Chris N. Cahnovsky

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Division of Land Pollution Control

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Illinois Department of Commerce and Community Affairs

Jack Lavin, Director

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Illinois State Chamber of Commerce

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215 East Adams Street

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Alton, Illinois 62002

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Stephen K. Davis

Illinois Department of Natural Resources

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Illinois Department of Natural Resources

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Illinois Historic Preservation Agency

Preservation Services/Archeology Section

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Scott Franks

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Wood River, Illinois 62095

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Fred L. Hubbard, Mayor 400 S. Central Roxana, Illinois 62084 618/254-0345 (Phone)

Ms. Nona Austin, Clerk 400 S. Central Roxana, Illinois 62084 618/254-0345 (Phone)

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www.conocophillips.com (e-mail)

Marathon-Ashland Pipe Line Co. 618/254-1112 (Phone) South 6th Street

Wood River, Illinois 62095

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Local Civic Organizations

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Wood River, Illinois 62095

Sharon Arnold 618/254-8102 (Phone) BP Volunteers

P.O. Box 310
Wood River, Illinois 62095

Bob Drake, President 618/254-1993 (Phone)

Wood River Civic Action Body
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Eleanor Alexander 618/254-4078 (Phone)
Citizen's Cornerstone Commission of Wood River

River Bend Growth Association

Original Issue Date – 05/16/00

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5800 Godfrey Road, Alden Hall Godfrey, Illinois 62035

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Greater Alton Twin Rivers Convention and Tourism Bureau 200 Piasa Alton, Illinois 62002 618/465-6676 (Phone)

Wildlife Organizations

Wildlife Habitat Enhancement Council 1010 Wayne Avenue, Suite 920 Silver Spring, MD 20910 231/734-3964 (Phone) 301/588-4629 (Fax) www.wildlifehc.org (e-mail)

National Audubon Society 700 Broadway New York, New York 10003 212/979-3000 (Phone) 212/979-3188 (Fax) www.audubon.org (e-mail)

Ed Stirling, President Audubon Council of Illinois 13807 Beaver Drive Roscoe, Illinois 61075 815/389-4775 (Phone) stirli@hughestech.net (e-mail)

Ducks Unlimited
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Memphis, Tennessee 38102

901/758-3825 (Phone) www.ducks.org (e-mail)

Waste Management Research Center 1 East Hazelwood Drive Champaign, Illinois 61820 217/333-8940 (Phone)

Illinois State Natural History Survey Chief 607 East Peabody Champaign, Illinois 61820 217/333-6830 (Phone)

Illinois State Geological Survey Chief 615 East Peabody

217/344-1481 (Phone)

Champaign, Illinois 61820 Illinois State Water Survey

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2204 Griffith Drive Champaign, Illinois 61820

Interested in all Part B Permits and their Modifications

Illinois League of Women Voters 332 South Michigan Avenue, #1050 Chicago, Illinois 60604-4301

Ellen Riley, Operations Manager Envirite Corporation 16435 South Center Avenue Harvey, Illinois 60426

Cheryl Frank Lee News Service Statehouse Press Room Springfield, Illinois 62706

Citizens for a Better Environment 205 W. Monroe, 4th Floor Chicago, Illinois 60606

Jack Darin, Sierra Club

200 N. Michigan Ave., Suite 505
Chicago, Illinois 60601-5908

Lionel Trepanier, Chicago Greens 202 South State, Suite 1500 Chicago, Illinois 60604

Tita LaGrimas, Director Reg. Affairs Pollution Control Industries 4343 Kennedy Ave. East Chicago, Indiana 46312

Sierra Club Prairie Group PO Box 131 Urbana, Illinois 61803

Hazardous Waste Permit Monitoring Group Environmental Information Limited 7301 Ohms Lane, Suite 460 Edina, Minnesota 55439

Bob Burke Safety-Kleen Dolton Recycle Center 633 E. 138th St.

Original Issue Date – 05/16/00 Revised by URS and approved by IEPA 9/04/03

Page 10 of 11

Dolton, Illinois 60419

Bill Schade, Operations Manager Safety-Kleen Dolton Recycle Center 633 E. 138th St. Dolton, Illinois 60419

Interested in Initial, Renewal Part Bs & RAPPs only

Gretchen Monti Monti Communications, Inc. 3 Timberlake Road Bloomington, Illinois 61704

Interested Parties for Madison County

Kathleen O'Keefe Neighborhood Law Office 705 Summit Avenue East St. Louis, Illinois 62201

Kathy Andria SPILL/ESL Comm. Action Network 348R Collinsville Avenue East St. Louis, Illinois 62201

Newspaper that Publishes Public Notices

The Telegraph 111 East Broadway Alton, Illinois 62002 618-463-2500 (Phone)

Farm.

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ground tanks at the North Tank Farm, the South Tank Farm, and the Korea Tank

This RCRA permit renewal is for post-closure care of the SFP. A detailed description of the location and operation of the SFP is provided in Section B.1.3 of this application.

B.1.2 Process Flow Diagram

There are no operating hazardous waste management units at the BP Main Plant. Therefore, this section is not applicable.

B.1.3 Units

Hazardous Waste Management Units

The SFP is located in the southwest portion of the Main Plant, west of the Spray Ponds (see Figure B-2B), and was used for storage of hazardous and non-hazardous APAC wastes prior to their disposal off-site. The SFP originally measured approximately 75 feet long by 25 feet wide and was approximately 4 feet deep. It contained waste oil, sludge, calcium sulfonate, magnesium sulfonate, zinc phosphate phenates, high sulfur acids, high phosphate acids, polymers, SAE 5W oil, filter cakes, and phosphorus pentasulfide. All wastes were considered non-hazardous except phosphorus pentasulfide, which is considered a reactive sulfide material. (Text from the May 2003 Permit Application was removed)

The SFP is certified closed and is under RCRA Post-Closure Care. The SFP is also identified as SWMU 33 in the Corrective Action portion of the current RCRA permit.

SFP Closure Activities

In 1986, the sludge material in the SFP was solidified with fly ash, excavated and transported offsite to a landfill. The buried flatbed rail car was discovered during excavation activities and was removed and disposed as scrap metal with the solidified sludge material. The oil in the SFP was removed and used as plant fuel. Rainwater in the SFP was treated at the former facility wastewater treatment plant.

Fourteen soil confirmation samples were collected from the excavated pit and analyzed for reactive sulfide. Results of confirmation samples indicated reactive sulfide levels were below 100 parts per million (ppm) and therefore no "hazardous waste" remained. The established closure clean-up for reactive sulfide was 100 ppm

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Section B

B.3.2 Floodplain Standard: 703.184(c), 724.118(b)

The BP Main Plant is not located within a 100-year floodplain of the Mississippi River due to the Wood River Levee District (WRLD) levee to the west of the Main Plant property as shown on Figures B-3A, B-3B, B-3C. In addition, the 100-year floodplain is not within 1,000 feet of the Plant property as determined from Flood Insurance Rate Maps prepared under the National Flood Insurance Program for the cities of Wood River, Hartford, Roxana and East Alton, Illinois.

B.3.3 Facilities in the 100-year Floodplain

BP Main Plant is not located within the 100-year floodplain.

B.3.4 Existing Facilities Not in Compliance with 35 IAC 724.118(b)

BP Main Plant is not located within the 100-year floodplain therefore it is in compliance with 724.118 (b).

B.4 <u>Traffic Information</u>: 703.183(j)

Traffic information is not required for post-closure permits (pursuant to Section 703.214).

B.5 Operating Record: 724.173

B 5.1 Contents of Operating Record:

Some of the requirements in this section do not apply because the site does not generate, store or receive hazardous waste. Information that does apply regarding the Operating Record is maintained by BP and kept on file at the GEM office located on the Main Plant property. The following Information is included in the operating record location and quantity of waste disposed, results of waste analysis, refusals of authorities to coordinate emergency services, reports regarding contingency plan implementation, inspection records, monitoring data, and post-closure records, post-closure monitoring data, and post-closure cost estimates.

The Operating Record will be maintained at the Plant and will be available for Illinois EPA inspection:

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F.2.15 (BB) Pumps, Valves, Pressure Release Devices & Other Connectors: 724.958

This section is not applicable to the BP Main Plant.

F.2.16 (CC) Air Emissions for Tanks, Surface Impoundments, & Containers: 724.983 through 724.990

This section is not applicable to the BP Main Plant.

- F.3 Equipment Requirements: 703:183, 724:132, 724:133, 724:134, 724:135 Currently, there are no hazardous waste management operations conducted at the SFP. The SFP is closed and is under Post-Closure care. This section references appropriate sections of the existing Wood River Former Refinery Site Contingency Plan [Attachment D of the Post-Closure Plan (Volume 2 of the RCRA Part B Post-Closure Permit Application for the SFP)], which provides procedures to respond to fire or release of hazardous waste. Based on site conditions: BR is not expecting a fire, explosion, or release of hazardous waste at the Main Plant facility.
- F.3.1 Waiver: The site is not seeking a waiver from the equipment requirements.
- F 3-2 Internal Communications The site internal communications system is the alarm system for the site. This is discussed under "Turning in Fire Alarms/Emergency Alarm Signals", and "Operation of Plant Alert System" on Pages 9 and 10 of the Contingency Plant.
- F.3.3 External Communications: The external communications for the site are the plant telephones. This system for external communications to summon emergency assistance from local police departments, fire departments, state or local emergency response teams, or other entities is discussed under "Turning in Fire Alarms/Emergency Alarm Signals" on Page 9 of the Contingency Plan.
- F.3.4 Water for Fire Control: Water for fire protection is provided by the City of Wood River. The site does not rely on internal water for fire control.
- F.3.5 Testing & Maintenance of Emergency Equipment
- F.3.5:1 <u>Equipment Testing</u>: The emergency equipment used at the site consists of assorted small extinguishers, spill containment booms, absorbent pads, pumps, fire hoses, vacuum trucks, and heavy equipment (including back hoes) front end loaders, and tractors). The emergency equipment does not require testing except for

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the fire alarm, which is discussed on page 9 of the Contingency Plan. Refer to page 16 of the Contingency Plan for a list of the emergency equipment.

- F.3.5.2 <u>Schedule</u>: The fire alarm is tested every Saturday at noon. The other equipment mentioned above is not tested. Refer to a Turning in Fire Alarms/Emergency Alarm Signals, on Pages 9 of the Contingency Plan for additional information.
- F.3.6. <u>Aisle Space</u>: The access roads surrounding the SFP provide sufficient aisle space to allow unobstructed movement of personnel; fire protection equipment, or spill control equipment to the unit in an emergency (Figure B-3B).
- F.4 <u>Preventive Procedures, Structures and Equipment: 703.183(h)</u> This section is not applicable for facilities in Post-Closure care.

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SECTION G – EVALUATION-ASSESSMENT OF POTENTIAL HAZARDS & CONTINGENCY PLAN

G.1 <u>Evaluation-Assessment of Potential Hazards Reports</u> 703.183(t), 703.183(g), 724.137, 724.150 through 724.156

Pursuant to Section 703.214 an Evaluation-Assessment of Potential Hazards Report is not required for facilities seeking a Post-Closure permit. The site currently has one regulated unit, the SFP. Post-Closure Care has been conducted for the SFP as part of the Part B Permit. The unit contained waste oil, sludge calcium sulfonate, magnesium sulfonate, zinc phosphate phenates, high sulfur acids, high phosphate acids, polymers, SAE 5W oil; filter cakes, and phosphorus pentasulfide. All wastes were considered non-hazardous except phosphorus pentasulfide, which is considered a reactive sulfide material. All wastes were removed from the SFP in 2001 and 2002, and the unit currently contains low residual constituent concentrations. No characteristically hazardous reactive materials remain in the SFP (refer to Volume 2, Attachment A) Land Reuse Investigation and Remediation Report for the SFP, for additional information). Therefore, it is unlikely for a fire, explosion, or release of hazardous waste or hazardous waste on hazardous waste constituents to air, soil or surface water at the SFP.

G-2 Contingency Plans 703.183(t), 703.183(g), 724.137, 724.150 through 724.156 BP has an existing Contingency Plan for the Wood River Former Refinery Site which was updated in April 2002, and is provided in Attachment D of the Post-Closure Plan (Volume 2 of the RCRA+Part B Post-Closure Permit Application for the SFP). The Contingency Plan is appropriate, based on the current status of the SFP discussed in Section G.1, to minimize hazards to human health and the environment from fires, explosions, or any unplanned sudden or non-sudden release of waste constituents to air, soil, or surface water.

The following sections are being added to the April 2002 Contingency Plan: "General Description": "Waste Types", and "Possible Hazards" are added as pages 4A and 4B; the "Procedure For Potential Emergency Repairs at the East Surge Pond" is added as page 20A (applies only to the Riverfront).

G.2.1.1 General Description:

The General Description has been added on Page 4A of the Contingency Plan.

G.2.1.2 Facility Drawing:

The Facility Drawing is provided on Figure 1 of the Contingency Plan.

G.2.1.3 Waste Types:

No waste is stored or managed at the site. The hazardous waste has been removed from the unit, and residual contamination with low constituent concentrations remains at a depth of 23 to 24 ft. Historical waste types stored at the SFP (the regulated unit) are discussed on pages 4A and 4B of the Contingency Plan:

G.2.1.4 Surrounding Land Uses:

Commercial and residential areas are located to the north and east of the Main Plant facility. Industrial areas are located to the south and the Riverfront property is located to the west. The Hartford Terminal (industrial) is located to the southwest. Beyond the Riverfront property is the Mississippi River (see Figure 1 of the Contingency Plan).

G.2.1:5 Possible Hazards:

It is not expected that hazard would result from a fire or explosion at the SFP. Refer to page 4B of the Contingency Plan for additional information.

G.2.2.2 <u>Availability and Responsibility of Emergency Coordinator.</u>
The Emergency Coordinator, his delegates, and their telephone numbers are listed on page 5 of the Contingency Plan. The responsibilities of the Emergency Coordinator and his delegates are discussed on pages 6 and 18 of the Contingency Plan.

G.2.2.3 Authority to Commit Resources:

As stated on page 4, the Emergency Goordinator shall have site responsibility and authority in responding to all incidents. Also refer to pages 6 and 18.

G.2.3 Assessment:

G.2.3.1 Off-Site Impact:

Refer to "Duties of the On-Site Emergency Coordinator", on page 6, number 4; of the Contingency Plan.

G.2.3.2 Evacuation Determination:

Refer to the "Duties of the On-Site Emergency Coordinator", on page 6, number 4A, of the Contingency Plan.

G.2.5 Emergency Response Procedures: 724:156

G.2.5.1 Identification of Materials Released:

A discussion of the waste type for the SFP is provided on page 4B of the Contingency Plan. Refer to "Duties of the On-Site Emergency Coordinator", on page 6, number 2, of the Contingency Plan.

G.2.6 Control Procedures: 724:152(a), 724:156

G.2.6.1. Prevention of Recurrence or Spread of Fires, Explosions, or Releases: Refer to "Duties of the On-Site Emergency Coordinator", page 6, number 5, of the Contingency Plan.

G.2.7 Evacuation Plan: 724.152(f)

G.2.7.2 Evacuation Routes:

The evacuation routes are shown on Figure 1 of the Contingency Plan. The routes and meeting locations were chosen to allow the swiftest exit possible (i.e., the nearest exit to the principal work station locations). Additional information is provided in "Catastrophic Incident Procedures" (last paragraph) of the Contingency Plan.

G.2.8 Post-Emergency Actions: 724.156(g), 724.156(h)

G.2.8.1 Storage and Treatment of Released Material:

Refer to the "Duties of the On-Site Emergency Coordinator", page 6, number 7, of the Contingency Plan.

G.2.8.2 Management of Incompatible Waste:

Refer to the "Duties of the On-Site Emergency Coordinator", page 6, number 8a, of the Contingency Plan:

G.2.8.3 Post-Emergency Equipment Maintenance:

Refer to the "Duties of the On-Site Emergency Coordinator", page 6, number 8b, of the Contingency Plan.

G.2.9 Reporting Requirements: 724.156(i) and (j)

G.2.9.1 Post-Emergency Response Actions:

Refer to "Duties of the On-Site Emergency Coordinator", page 6, number 8c, of the Contingency Plan.

G.2.9.2 Note in the Operating Record:

Refer to "Duties of the On-Site Emergency Coordinator", page 7, number 8d, of the Contingency Plan.

G.2.9.3 Written Report:

Refer to "Duties of the On-Site Emergency Coordinator", page 7, number 9, of the Contingency Plan.

G.2.10 Coordination Agreement Requirements: 724.137, 724.152(c), 724.153(b)

G.2.10.1 Documentation of Agreements & Arrangements:

Refer to "Catastrophic Incident Procedures", page 8, and "Coordination Agreement Requirement", page 21, of the Contingency Plan.

G.2.10.2 Coordination Agreements:

Refer to the "Coordination Agreement Requirement", page 21, of the Contingency Plan.

G.2.10.3 Facility Operations:

No hazardous waste is managed at the site. However, BP is an associate of the Twin Rivers Community Awareness Emergency Response Council. Refer to "Coordination Agreement Requirement", on page 21, of the Contingency Plan:

G.2.10.4 Familiarize Local Hospitals:

No hazardous waste is managed at the site. Refer to "Coordination Agreement Requirement", on page 21, of the Contingency Plan.

General Description

The BP Wood River Former Refinery consists of the Main Plant facility and the Riverfront facility. The BP Main Plant is approximately 550 acres, and the Riverfront property is approximately 231 acres (Figure 1). Most of the Main Plant and Riverfront facilities are located within the City of Wood River, Illinois; the southern portion of each facility is located within the Village of Hartford, Illinois. The Riverfront Property is located west of the Main Plant between the Wood River Levee District levee and the Mississippi River.

Amoco Oil Company owned the Main Plant and Riverfront facilities until the merger with BP in 1999. The Amoco Refinery operated at the Main Plant from 1908 until 1981. The Amoco Petroleum Additives Company (APAC) operated at the Main Plant from 1957 until 1996. Amoco operated a series of wastewater treatment ponds at the Riverfront during refinery operation. BP Marketing continues to operate a storage and distribution facility at the Main Plant for gasoline and petroleum distillates. No hazardous waste is treated, stored or disposed as part of the Marketing operations.

Main Plant

The Main Plant had two hazardous waste units: the North Cell of Spray Pond 1 (NC-SP1), and the South Flare Pit (SFP). These units have been undergoing post-closure care since the Part B Permit for the Main Plant became effective in November 1993. The NC-SP1 underwent closure by removal in 2002. A Class 3 Permit Modification was submitted to the Illinois EPA and is currently under review.

Riverfront

The Riverfront has two hazardous waste units: the East Surge Pond (ESP) (20.9 acres) and the closed Pond 1 Landfill (4.1 acres). Current operations at the Riverfront include post-closure care of the Pond 1 Landfill, and storage of nonhazardous water from the Publicly Owned Treatment Works (POTW) in the ESP under an Adjusted Standard (Exhibit B-1) in accordance with 35 Illinois Administrative Code 724.213(d).

Waste Type

Main Plant

The SFP was approximately 75 feet long by 25 feet wide by 4 feet deep. The unit contained waste oil, sludge, calcium sulfonate, magnesium sulfonate, zinc phosphate phenates, high sulfur acids, high phosphate acids, polymers, SAE 5W oil, filter cakes, and phosphorus pentasulfide. All wastes were considered nonhazardous except phosphorus pentasulfide, which is considered a reactive sulfide material. All characteristically hazardous material was removed from the SFP in 2001 and 2002, and the unit currently contains low residual constituent concentrations, but does not contain any reactive material.

Riverfront

Dissolved air flotation (DAF) (K048, a listed hazardous waste) was stored in former Ponds 1, 1A, 2, 2A, 3, 3A, and 4 at the Riverfront facility from 1977 to 1981. The Pond 1 Landfill is located in the area of former ponds 1, 1A, and the north portion of Pond 2. The ESP is located in the area of the south portion of former pond 2, and all of former ponds 2A, 3, 3A, and 4. The pumpable sludges from former Ponds 1, 1A, 2, 2A, 3, 3A, and 4 were stabilized using the Chemfix® process and disposed in the Permitted Nonhazardous Waste Landfill (former Pond 5). The heavy sludges from the ponds were solidified, and disposed in the Pond 1 Landfill. The visibly stained soils from the ponds were also placed into the Pond 1 Landfill. A one-foot clay liner was subsequently placed on the floor and walls of the ESP.

The Pond 1 Landfill was constructed in accordance with 35 IAC 724.400, and was certified closed on June 15, 1995.

Possible Hazards

Main Plant

It is not expected that a hazard would result from a fire or explosion at the SFP. There is no characteristic hazardous waste present at the SFP; low constituent concentrations of residues remain at a depth of 23 to 24 ft. Presently, a protective fence surrounds the SFP.

Upon approval of the Land Reuse Investigation and Remediation Report for the SFP (Volume 2, Attachment A of the Post Closure Plan) the SFP will be back-filled with clean soil to grade.

Riverfront

A hazard from a fire or explosion at the ESP is not likely since the hazardous waste was removed from the unit, a 1-foot clay liner was installed, and the unit is used for storage of nonhazardous water. A release of wastewater from the ESP would not result in exposure to hazardous waste.

Hazards from fire or explosion at the Pond 1 Landfill are not likely because the wastes were stabilized by solidification, the unit was constructed in accordance with 35 IAC 724.400, and it was closed according to 35 IAC 725.215. The waste containment features of the landfill include containment dikes, a leachate collection and removal system, a leak detection system, run-on/run-off controls on the cap, and a vegetative layer to stabilize the cap. The landfill is completely surrounded by a 6-foot security fence with a padlocked gate. The landfill is protected from a 100-year flood event by a flood protection dike, which would also function to contain any releases or fire.

Procedure for Potential Emergency Repairs at the East Surge Pond

The procedure for polential entergency repairs at the East Stinge Londers ployable below in accordance with 36 IAC 124 3274 Emergency Repairs Contingency Plans.

- a) The East Surge Pond would be removed from service in accordance with paragraph (b) when:
 - 1) The level of liquids in the impoundment suddenly drops and the drop is not known to be caused by changes in the flows into or out of the impoundment; or
 - 2) The dike leaks.
- b) If the East Surge Pond must be temporarily removed from service as required by paragraph (a), the following procedure would be conducted:
 - 1) Immediately shut off the flow or stop the addition of liquids into the impoundment
 - 2) Immediately contain any surface leakage which has occurred or is occurring
 - 3) Immediately ascertain the cause of the leak
 - 4) Initiate repairs as appropriate
 - 5) Take any other necessary steps to stop or prevent catastrophic failure
 - 6) If a leak cannot be stopped by any other means, empty the impoundment
 - 7) Notify the Agency of the problem in writing within seven days after detecting the problem

Additionally, the *Contingent Corrective Measures Plan* (appendix E of the Adjusted Standard for the East Surge Pond), would be implemented as needed.



Amoco Oil Company

200 East Randolph Drive Post Office Box 6110A Chicago, Illinois 60680

December 5, 1984

Mr. William H. Miner, Chief Technical, Permits, and Compliance Section USEPA Region V 230 South Dearborn Street Chicago, Illinois 60604



Dear Sir:

RCRA Permit Part A--Amoco Oil Company,
Wood River, Illinois ILD 980700967 6, TRS, TSD, PA

At the suggestion of Mr. Larry Eastep of the Illinois EPA, we are writing you to discuss a change that should possibly be made for procedural reasons to Amoco Oil Company's RCRA permit application Part A for the main plant site in Wood River, Illinois (ILD 980700967).

During a reinspection of this facility by IEPA personnel on October 16, 1984, it was called to our attention that we had mistakenly listed two surface impoundments as storage facilities for reactive wastes in our Part A. Both should have been listed as treatment facilities. This situation was documented in our October 23, 1984 letter to the IEPA Southern Regional Office. A copy of this letter is attached for your information.

Since petroleum refining operations at this site were suspended in 1981 and are not expected to resume, we plan to close those hazardous waste management facilities that were associated with petroleum refining. Accordingly, we submitted a closure plan to the IEPA on July 12, 1984. A copy of that submission is also attached. In connection with this closure plan, we discussed with Mr. Eastep the need to revise Part A to reflect treatment rather than storage in the two impoundments, or if a detailed narrative incorporated in the closure plan would be satisfactory. From a practical point of view, Mr. Eastep said the narrative would suffice but, procedurally, Part A should be revised. He then suggested we seek your advice.



WMD-RAIU EPA, REGION M Mr. William H. Miner Page 2

In view of this background, including our plans for closure, we would appreciate your letting us know if we should proceed to revise Part A for procedural reasons. If you wish to discuss any of this information, you can call me at 312/856-7826 or E. J. Sullivan at 312/856-5858.

Yours truly,

hu J. Huddle/2/5 John G. Huddle

Director Environmental Control and Planning

Mail Code 1203

EJS/jn

Attachments

Larry Eastep, IEPA, w/o Attachments

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Suilivan:

You should have received an acknowledgement of our receipt of the ermit application waterial for the above-referenced hazardous waste under the Pesource Conservation and Recovery Act (RCRA) penwit program. gly, this letter constitutes the next step in the formal process toward issuance or decial of a Great penuit. Under the authority of 70.10, this is a formal request for submittal of Part R of the permit ion for the above-referenced facility.

is a copy of 40 CFR 270.14, which lists the items required for no the Part R permit application for the facility. The Part R in quadruplicate and postmarked no later than low. The original and one copy of the application must be sent to FPA and the other two copies to the Illinois EPA. Please uniquely ach page of the application including all attachments (maps, ations, etc.). A certification statement identical to the one stated R 270.11(d) must accompany the application and all additional submittals. In application to the following addresses:

PCDA ACTIVITIES

Part 8 Permit Application

11.5. FPA. Region V

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Chicago, Illinois Apago, 3587

Larry Faster, Menager Permit Section, N.Pr. Illimois EPA 2200 Churchill Hoad Springfield, Illinois 62607

conditted to conducting the ACRA permitting process as efficiently as . Forsequently, I suggest you contact Mr. havid holan, of my staff, 086-0904, as you begin preparing your application. Mr. holan will be to discuss specific meeds of your application or to meet with you on. These efforts are intended to generate complete applications, requiring any information beyond that which is necessary to make RCRA ecisiens.

to the Freedom of Information Act and U.S. Environmental Protection s. FPA) Freedom of Infernation regulations. If you wish, however, you a claim of business confidentiality by printing the word "Confidential" ige of the application which you halieve contains confidential business in. U.S. specially review business confidentiality claims under regulato ore part 2, and may later request substantiation of such claims. des these rules carefully before making a claim.

itor parts of your application as confidential, please provide us with nformation copy of the application. The public information copy rust al to the full application with the exclusion of the confidential

-46 rep part 264, which include technical standment, storage, and land disposal facilities. licable to your facility upon issuance of a PCRA ₩ 688 798 our "Cuidance For Permit Application Preparation" N TO" ist" are also enclosed, which will help you in RECEIPT FOR CERTIFIED WAIL

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Amoco Oil Company

200 East Randolph Drive Post Office Box 6110-A Chicago, Illinois 60680

March 13, 1984

RCRA Activities
Part B Permit Application
U. S. EPA, Region V
Post Office Box A3587
Chicago, Illinois 60690-3587

Attention: Mr. David Dolan

Gentlemen:

Amoco Oil Company Wood River Refinery ILD 980700967 G, TRS, TSD, PA

In a telephone conversation betweem Mr. Robert Stone, USEPA, and E. J. Sullivan, Amoco, on February 23, 1984, Mr. Stone suggested that because of the planned partial closure of hazardous waste facilities at Amoco's former refinery in Wood River, we request EPA to reconsider its January 10, 1984, request for a Part B application for Wood River at this time. The reasons for this request are discussed below.

Early in 1981, Amoco announced that refining operations at Wood River would be suspended and by June 1, 1981, all petroleum processing units had been shut down. The equipment was put in standby condition. Additive manufacturing operations by Amoco Chemicals Corporation, however, continued and are ongoing at present.

Most of the hazardous waste activity at Wood River was associated with petroleum refining. Now that the decision has been made not to resume refining operations at that site, we are planning partial closure. A consultant is presently revising and expanding our closure plans and when this work is completed, we will formally submit the revised plans to the Illinois EPA.

Following partial closure, the one remaining hazardous waste activity will be the water soaking of empty paper calcium oxide bags to render them non-reactive and non-ignitable. Calcium oxide is used in a number of manufacturing processes at Wood River. It is received in paper bags. If the empty bags are moistened, the heat of reaction between the residual calcium oxide and the water is sufficient to cause the bags to ignite. Neither the calcium oxide nor the paper is a hazardous substance, but the combination possesses the characteristics of reactivity and ignitability. Treatment consists merely of soaking the empty bags with enough water to prevent a temperature rise sufficient to ignite the paper. Following this treatment, the bags are no longer a hazardous waste even when dry because the calcium oxide has been hydrated.



Page 2

Since this will be the only hazardous waste activity remaining at the site, and since it is of such minor importance and consequence, Mr. Stone suggested that we try to determine if the operation qualifies for an exemption under 40 CFR 270.1(c)(2) as possibly a totally enclosed treatment system. There is no question that the treatment facility is "constructed and operated in a manner which prevents the release of any hazardous waste or constituent thereof into the environment during treatment," and, in retrospect, we believe that soaking the empty bags is a part of the process. It is the operator's responsibility from the standpoint of plant safety, that whenever he has occasion to use calcium oxide, he must water-soak the empty bags before he presents them for disposal. In practice, after the bags are emptied, they are immediately transported to and placed in a metal, open-top container where they are soaked with water. Thus, the waste from the process is the empty, nonhazardous, water-soaked bag.

We would appreciate your prompt response to our request that you reconsider calling for a Part B application for Amoco's former refinery site in Wood River at this time. With your concurrence that soaking the empty calcium oxide bags is a part of the process, we will proceed with whatever steps are necessary to withdraw our Part A application for this site. We shall be pleased to furnish additional information you may require or to discuss the matter if you wish. Any questions should be addressed to E. J. Sullivan at (312) 856-5858.

Yours truly,

J. G. Huddle

Director, Environmental Control and Planning

Mail Code 1203

EJS/lar

Larry Eastep, IEPA
Robert Stone, USEPA

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5HW-12

CERTIFIED MAIL #P611630885 RETURN RECFIPT REQUESTED

J.G. Huddle, Director Environmental Control and Planning Amoco Oil Company P.O. Box 6110-A Chicago, Illinois 60680

Re: Permit Application Withdrawal Letter (Insufficient Information)
Amoco Oil Co.--Wood River Refinery
ILD 980700967

Dear Mr. Huddle:

This is to acknowledge receipt of your letter of March 13, 1984, requesting that the U.S. Environmental Protection Agency reconsider its request for the Part B permit application from the Amoco Oil Company--Wood River facility. You did not provide sufficient information to enable this office to concur with your request. You must provide a detailed explanation why the application request should be withdrawn, which must be signed by a responsible corporate officer (see enclosure). Also, if at any time, since November 19, 1980, your operation included treatment, storage, or disposal of hazardous waste subject to Federal or State regulations, a closure plan must be submitted directly to the Illinois Environmental Protection Agency, Permit Section, Division of Land Pollution Control, 2200 Churchill Road, Springfield, Illinois 62706. Requirements for closure are found in 35 Ill. Adm. Code Part 725, Subpart 6 (enclosed).

If no response is received in this office within 30 days, we will assume your facility requires a permit. Accordingly, we will continue to await your application.

Please do not hesitate to contact David Dolan at (312) 886-1484, for assistance, if you have any questions.

Sincerely yours,

ORIGINAL SIGNED BY
WILLIAM H. MINER
William H. Miner, Chief
Technical, Permits, and Compliance Section

Enclosures

cc: Larry Eastep, IEPA Bill Radlinski, IEPA

bcc: Lisa Pierard, RAIU Chuck Lewis, GNCU

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RETURN RECEIPT REQUESTED

J.G. Huddle, Director Environmental Control and Planning Amoco Oil Company P.O. Box 6110-A Chicago, Illinois 60680

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Amoco Oil Co.--Wood River Refinery
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If no response is received in this office within 30 days, we will assume your facility requires a permit. Accordingly, we will continue to await your application.

Please do not hesitate to contact David Dolan at (312) 886-1484, for assistance, if you have any questions.

Sincerely yours,

William H. Miner, Chief
Technical, Permits, and Compliance Section

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J. F. Horner Vice President - Refining & Engineering **Amoco Oil Company**

200 East Randolph Drive Post Office Box 6110-A Chicago, Illinois 60680 Refining & Engineering Department 312-856-5450

June 12, 1984

Certified Mail 2048542 Return Receipt Requested

RCRA Activities
Part B Permit Application
Region V, U.S. Environmental Protection Agency
Post Office Box A3587
Chicago, Illinois 60690-3587

RECEIVED

JUN 1.8 1984 WMD-RAIU EPA, REGION V

Gentlemen:

Amoco Oil Company Wood River Refinery, ILD 980700967 G, TSD, PA

Please refer to your May 18, 1984 letter responding to our March 13, 1984 request that Region V reconsider calling for a Part B permit application for Amoco's Wood River facility (ILD 980700967) at this time. You requested that a more detailed explanation as to why the application request should be withdrawn be provided and that our request be signed by a responsible corporate officer. We are once again requesting that you reconsider our request for withdrawal of the Part B application for reasons that will be described.

The principal reason why we believe your request for a Part B permit application should be withdrawn is that a final decision has been made not to resume refining operations at Wood River and Amoco Oil Company plans partial closure of the site. By this we mean closure of the hazardous waste management facilities under RCRA; no plans have been made yet for dismantling processing equipment. Our consultant has completed the site closure plan which will be submitted to the Illinois Environmental Protection Agency pursuant to 35 Ill. Adm. Code, Part 725, Subpart G. This submission will be made by July 15, 1984. USEPA will be notified by copy of the submission.

Another reason why we believe the Part B permit application request should be withdrawn is the inconsequential nature of the remaining calcium oxide bag soaking operation. In fact, it is reasonable to conclude that this activity is a part of the process rather than hazardous waste treatment for the following reasons.

While neither calcium oxide nor paper is listed as a hazardous substance, the empty calcium oxide bags may fit the definition of ignitable and reactive because if they are moistened with less than an adequate amount of water, the heat of reaction between the remaining traces of calcium oxide and water has on occasion been sufficient to cause the bags to ignite. However, if the bag is soaked with a large amount of water, the water absorbs the heat of reaction and prevents a temperature rise sufficient to ignite the paper. Once the bag has been water soaked, there is no further potential for ignition.

As discussed in our March 13, 1984, letter, we were not sure that the bag-soaking operation could be exempted from regulation on the basis of being a totally enclosed treatment system. However, we now believe that treatment of the empty calcium oxide bags is actually a part of the manufacturing process and that the waste material from the process is the water-soaked bags. It is in the interest of plant safety that the bags are soaked with water.

Following is a description of the way in which calcium oxide is used at Wood River. Calcium oxide is used as a reactant in a manufacturing process and is received in paper bags. At the point in the process that calcium oxide is required, an operator will transport the required number of bags to a stirred reaction vessel. The calcium oxide is added, a bag at a time, to the reaction mass through a top hatch. When the addition is complete, the operator collects the empty bags and places them in a metal, open-top container where they are soaked with water. The water soaked bags are subsequently disposed of as a nonhazardous waste.

Based on the foregoing, we request your approval to withdraw the calcium oxide bag soaking operation from Part A of our permit application.

We would also like to take this opportunity to clarify the present status of the plant site: (1) Amoco Petroleum Additives Company is conducting a lube and petroleum additive manufacturing operation on the site and is maintaining surveillance and security of hazardous waste management facilities; (2) Amoco Oil's Marketing department is conducting a truck and marine terminaling operation; and (3) Amoco Oil's Refining department is making preparations for closing hazardous waste management facilities on the site.

In summary, in view of our plans for closure of hazardous waste management facilities on Amoco's main plant site in Wood River (ILD 980700967), we respectfully request that you withdraw your request for a Part B permit application at this time. We shall then withdraw our Part A permit application upon completion of closure.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Yours truly

NODO



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 5 230 SOUTH DEARBORN ST. CHICAGO, ILLINOIS 60604

REPLY TO THE ATTENTION OF

5HS-JCK-13

CERTIFIED MAIL RETURN RECEIPT REQUESTED

U.S. EPA ID #:

ILD980700967

AMOCO DIL CO WOOD RIVER REFINERY BOX 182 WOOD RIVER IL 62095

RE: Hazardous Waste Permit Application

Dear Permit Applicant:

As you know, you have previously submitted Part A of the Resource Conservation and Recovery Act (RCRA) permit application for the above-referenced facility. Timely submission of "the Part A" has allowed most hazardous waste management facilities to continue to operate under RCRA "interim status" (or the State program equivalent), while complying with applicable technical and record-keeping standards.

On November 8, 1984, the Hazardous and Solid Waste Amendments of 1984 (the 1984 Amendments) were enacted to modify RCRA. Under the 1984 Amendments, all RCRA permits issued after the date of enactment must provide for corrective action for all releases of hazardous waste or hazardous waste constituents from any solid waste management unit, regardless of the time at which waste was placed in the unit. In addition, all interim status facilities are subject to corrective action requirements, regardless of whether they have 1) submitted a Part B application, 2) submitted a closure plan, 3) reverted to generator status only, 4) actually closed, or 5) none of these. Unless our Agency has formally terminated the facility's interim status, the corrective action requirements apply. Please note that both hazardous and non-hazardous waste can meet the definition of solid waste under 40 CFR 261.2 (or the State regulation equivalent).

We must determine whether releases of hazardous waste or hazardous waste constituents have ever occurred at the facility site. If they have, we must ensure that corrective actions either have been taken or will be taken to eliminate threats to public health or the environment. An important element in our decision process is the information that you provide on the enclosed certification statement. Please read it carefully and either sign it and return it, or return it unsigned with a cover letter of explanation, within 45 days of the date of this letter. At some point in time, public input will be sought to either confirm or deny information you provide, or information we gather on our own, concerning releases and corrective actions.

Please mail your response to the following:

RCRA Activities Region V P. O. Box A3587 Attention: ATKJG Chicago, Illinois 60690

Sincerely yours,

David A. Stringham

Chief, Solid Waste Branch

Enclosure

CERTIFICATION REGARDING POTENTIAL RELEASES FROM SOLID WASTE MANAGEMENT UNITS

F	ACIL	ITY NAME:				
EP#	I.D	. NUMBER:				
LOC	OITA	N CITY:				
		STATE:				
1.	Are close CURR	there any order to the control of th	of the following so r facility? NOTE - N IN YOUR PART A AP	lid waste mana DO NOT INCLUDE PLICATION	gement units (exi HAZARDOUS WASTE	sting or UNITS
				YES	NO	
		andfill urface Imp	oundmont		,	
	• L	and Farm	Junument			
		aste Pile ncinerator		***********		
	1,1		k (Above Ground)			
			k (Underground)			
	U	ontainer Si njection W	torage Area ells			
	° ₩	ast ew ater '	Treatment Units			
		ransfer Sta	ations ling Operations	,		
	° W	aste Treati	ment, Detoxificatio			
	° 0	ther	· .	_		
2.	provof i would RCRA dispof e	ide a desc n each uni d be consid . Also in osed of and ach unit a	Yes" answers to any ription of the wast t. In particular, dered as hazardous clude any available d the dates of disp nd include capacity plan if available.	es that were s please focus o wastes or haza data on quant osal. Please dimensions a	tored, treated or mot rdous constituent ities or volume (also provide a de	r disposed the wasted ts under of wastes escription
		·			· · · · · · · · · · · · · · · · · · ·	

NOTE: Hazardous wastes are those identified in 40 CFR 261. Hazardous constituents are those listed in Appendix VIII of 40 CFR Part 261.

	le on any prior or current releases of hazardous wastes or constituents the environment that may have occurred in the past or may still be curring.
Ρl	ease provide the following information
b.	Date of release Type of waste released Quantity or volume of waste released Describe nature of release (i.e., spill, overflow, ruptured pipe or tank, etc.)
_	
pl wh th	regard to the prior or continuing releases described in Number 3 above ease provide (for each unit) any analytical data that may be available ich would describe the nature and extent of environmental contamination at exists as a result of such releases. Please focus on concentrations zardous wastes or constituents present in contaminated soil or groundward.
_	
pr de th wh th tr	certify under penalty of law that this document and all attachments were epared under my direction or supervision in accordance with a system signed to assure that qualified personnel properly gather and evaluate e information submitted. Based on my inquiry of the person or persons o manage the system, or those persons directly responsible for gathering e information, the submittal is, to the best of my knowledge and belief ue, accurate, and complete. I am aware that there are significant penales for submitting false information, including the possibility of fine d imprisonment for knowing violations. (42 U.S.C. 6902 et seq. and CFR 270.11(d))
pr de th wh th tr	epared under my direction or supervision in accordance with a system signed to assure that qualified personnel properly gather and evaluate e information submitted. Based on my inquiry of the person or persons o manage the system, or those persons directly responsible for gathering e information, the submittal is, to the best of my knowledge and belief ue, accurate, and complete. I am aware that there are significant penales for submitting false information, including the possibility of fine
pr de th wh th tr	epared under my direction or supervision in accordance with a system signed to assure that qualified personnel properly gather and evaluate e information submitted. Based on my inquiry of the person or persons o manage the system, or those persons directly responsible for gathering e information, the submittal is, to the best of my knowledge and belief ue, accurate, and complete. I am aware that there are significant penales for submitting false information, including the possibility of fine d imprisonment for knowing violations. (42 U.S.C. 6902 et seq. and

CONTINUENC RELEASES AT PERMITTED PACILITIES

SEC. 206. Section 3004 of the Solid Waste Disposal Act is amended by adding the following new subsection after subsection (t) thereof:

"ful Continuing Releases at Permitted Facilities.—Standards promulgated under this section shall require, and a permit issued after the date of enactment of the Hazardous and Solid Waste Amendments of 1984 by the Administrator or a State shall require, corrective action for all releases of hazardous waste or constituents from any solid waste management unit at a treatment, storage, or disposal facility seeking a permit under this subtitle, regardless of the time at which waste was placed in such unit. Permits usued under section 3005 shall contain schedules of compliance for such corrective action (where such corrective action cannot be completed prior to issuance of the permit) and assurances of financial responsibility for completing such corrective action."



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 5 230 SOUTH DEARBORN ST. CHICAGO, ILLINOIS 60604

REPLY TO THE ATTENTION OF

5HS-JCK-13

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

U.S. EPA ID #: ILD006272629

AMOCO OIL CO MAIN OFF & WATER TREA*
P O BOX 182
WOOD RIVER
IL 62095

62095 RE: Hazardous Waste Permit Application

Dear Permit Applicant:

As you know, you have previously submitted Part A of the Resource Conservation and Recovery Act (RCRA) permit application for the above-referenced facility. Timely submission of "the Part A" has allowed most hazardous waste management facilities to continue to operate under RCRA "interim status" (or the State program equivalent), while complying with applicable technical and record-keeping standards.

On November 8, 1984, the Hazardous and Solid Waste Amendments of 1984 (the 1984 Amendments) were enacted to modify RCRA. Under the 1984 Amendments, all RCRA permits issued after the date of enactment must provide for corrective action for all releases of hazardous waste or hazardous waste constituents from any solid waste management unit, regardless of the time at which waste was placed in the unit. In addition, all interim status facilities are subject to corrective action requirements, regardless of whether they have 1) submitted a Part B application, 2) submitted a closure plan, 3) reverted to generator status only, 4) actually closed, or 5) none of these. Unless our Agency has formally terminated the facility's interim status, the corrective action requirements apply. Please note that both hazardous and non-hazardous waste can meet the definition of solid waste under 40 CFR 261.2 (or the State regulation equivalent).

We must determine whether releases of hazardous waste or hazardous waste constituents have ever occurred at the facility site. If they have, we must ensure that corrective actions either have been taken or will be taken to eliminate threats to public health or the environment. An important element in our decision process is the information that you provide on the enclosed certification statement. Please read it carefully and either sign it and return it, or return it unsigned with a cover letter of explanation, within 45 days of the date of this letter. At some point in time, public input will be sought to either confirm or deny information you provide, or information we gather on our own, concerning releases and corrective actions.

Please mail your response to the following:

RCRA Activities Region V P. O. Box A3587 Attention: ATKJG Chicago, Illinois 60690

Sincerely yours,

David A. Stringham

Chief, Solid Waste Branch

Enclosure

CERTIFICATION REGARDING POTENTIAL RELEASES FROM SOLID WASTE MANAGEMENT UNITS

	ITY NAME:	
EPA I.D	. NUMBER:	
LOCATIO	ON CITY:	
	STATE:	
clos		d waste management units (existing of NOT INCLUDE HAZARDOUS WASTE UNITS ICATION
		YES NO
_	andfill	
	Surface Impoundment and Farm	
Ļ	and raim Jaste Pile	
	ncinerator	
	storage Tank (Above Ground)	
	Storage Tank (Underground)	
U	Container Storage Area Injection Wells	
	lastewater Treatment Units	
	ransfer Stations	
	Maste Recycling Operations Maste Treatment, Detoxification	
	other	***************************************
prov of i woul RCRA disp of e	ride a description of the wastes in each unit. In particular, ploid be considered as hazardous was a lable do sed of and the dates of dispose	f the items in Number 1 above, plea that were stored, treated or dispo ease focus on whether or not the wastes or hazardous constituents unde ata on quantities or volume of wastal. Please also provide a descript dimensions and location at facility
<u></u>	, V	

NOTE: Hazardous wastes are those identified in 40 CFR 261. Hazardous constituents are those listed in Appendix VIII of 40 CFR Part 261.

	Type of waste released Quantity or volume of waste released
d.	Describe nature of release (i.e., spill, overflow, ruptured pipe or tank, etc.)
plea which that	egard to the prior or continuing releases described in Number 3 above se provide (for each unit) any analytical data that may be available h would describe the nature and extent of environmental contamination exists as a result of such releases. Please focus on concentrations rdous wastes or constituents present in contaminated soil or groundwa
plea which that	se provide (for each unit) any analytical data that may be available h would describe the nature and extent of environmental contamination exists as a result of such releases. Please focus on concentrations
I copredes the who the	se provide (for each unit) any analytical data that may be available h would describe the nature and extent of environmental contamination exists as a result of such releases. Please focus on concentrations

CONTINUES BELEASES AT PERMITTED PACILITIES

SEC. 206. Section 3004 of the Solid Waste Disposal Act is amended by adding the following new subsection after subsection (t) thereof:

"(u) Continuing Releases at Permitted Facilities.—Standards promulgated under this section shall require, and a permit issued after the date of enactment of the Hazardous and Solid Waste Amendments of 1984 by the Administrator or a State shall require, corrective action for all releases of hazardous waste or constituents from any solid waste management unit at a treatment, storage, or disposal facility seeking a permit under this subtitle, regardless of the time at which waste was placed in such unit. Permits usued under section 3005 shall contain schedules of compliance for such corrective action (where such corrective action cannot be completed prior to issuance of the permit) and assurances of financial responsibility for completing such corrective action.".

P 557 099 148

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RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED NOT FOR INTERNATIONAL MAIL

(See Rèverse)

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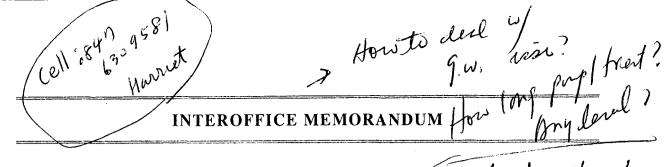
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P 557 099 148

RECEIPT FOR CERTIFIED MAIL

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TO:

HARRIET CROKE

FROM:

JOYCE MUNIE

SUBJECT:

RCRA PERMIT REVIEWS

DATE:

AUGUST 26, 2003

I would like to thank the United States Environmental Protection Agency (USEPA) for offering to perform RCRA permit reviews for the Illinois Environmental Protection Agency (IEPA) in an effort to reduce our backlog of renewal applications. To eliminate duplicative work or omissions and to insure our joint efforts are as efficient as possible, a 6 proposed outline of each Agency responsibilities is listed below: Viontomorium. I land

IEPA responsibilities

Attend initial meeting with USEPA reviewer before the start of the project to develop a scope of work for each individual project.

- Conduct at least one joint site visit to the applicant's facility with the USEPA prior to public notice of the draft permit.
- Provide USEPA with a schedule for completions of key project activities.
- Provide IEPA standard permit, cover letter, and fact sheet format (word processing document) to USEPA.
- Provide IEPA statutes, regulations and guidance documents to USEPA as necessary.
- Provide IEPA RCRA Permit Guidance document and checklist to USEPA.
- Provide written and verbal direction to USEPA reviewers as necessary.
- Review the groundwater and corrective action portions of the application and develop associated permit language and requirements.
- Compile all necessary information and send all formal correspondence (i.e. notice of deficiencies, request for additional information, draft permits, final permits, etc.) to the applicant and others as required by the regulations.
- Coordinate public notice, public hearing (if required), draft and final permit issuance.
- Conduct Quality Control review of USEPA's review of the Illinois portion of the permit.
- Collect and maintain the administrative record.

USEPA responsibilities

Attend initial meeting with IEPA Unit Manager and reviewer before the start of the project to develop a scope of work for each individual project.

- Conduct at least one joint site visit to the applicant's facility with the IEPA prior to public notice of the draft permit.
- Conduct review in a timely manner in accordance with the schedule provided by IEPA.
- Review IEPA/Bureau of Land records regarding past activities at the site.
- Review the permit application (except for the groundwater and corrective action portions of the application) in accordance with IEPA RCRA Permit Guidance document and checklist.
- Review the permit application (except for the groundwater and corrective action portions of the application) for conformance with IEPA statutes, regulations and guidance documents.
- Provide to IEPA review notes developed during the review of the application and used to develop the draft and final permit decision. These review notes should contain the following:
 - 1. Records of phone conversations regarding the application;
 - 2. A clear statement of what is being applied for;
 - 3. What rules, regulations, etc. were considered in the review; (Cite IEPA rules and regulations when appropriate.)
 - 4. Reasons for permit conditions or what information was lacking;
 - 5. Summary of the site history including information obtained during the review of past permits issued for the facility and their effect on the pending application;
 - 6. Recommended permit decision; and
 - 7. Completed IEPA review checklist.
- Provide to IEPA, draft notices of deficiencies as necessary, draft and final permit decision (except for the groundwater and corrective action portions of the application), cover letter, and fact sheet following IEPA format and using IEPA regulatory citations.
- Coordinate with IEPA reviewer and unit manager regarding any policy decisions that must be made to reach a final permit decision.
- Provide testimony at public hearings and permit appeals as necessary.
- The above described USEPA responsibilities apply only to reviews conducted by USEPA on the IEPA portion of the permit and do not address any USEPA portion of the permit which may be required.

R/EPA4626/MISC/RCRAMEMO3

Cc: Ted Dragovich
Steve Nightingale
Terri Blake Myers
Jim Moore

Main Plant

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY RCRA PART B HAZARDOUS WASTE PERMIT APPLICATION COMPLETENESS & TECHNICAL EVALUATION CHECKLIST

First Completeness Review

Facility Name: BP Products North America Inc., Former Wood River Refinery

Log No.: B-147R

State ID No.: 1191150001 USEPA No.: ILD980070967 Date application received: 5/9/2003

Revision No.: 1 Reviewer: MLC

Review Dates: 7/16/2003 -

A	Forms, Certifications, Confidentiality, Public Involvement	XX		
A.1	Forms	XX		
A.1.1	Part A Application	Y	Exhibit A-	
A.1.2	Other Permits	Y	Exhibit A- 1, Section X	
A.2	Certifications	XX		
A.2.1	Siting Certification	NA		Not a new pollution control facility.
A.2.2	Facility Certification	Y	Exhibit A-2	type Version of Home
A.2.3	Technical Information Certification	N		Not provided. Permittee indicates that the information provided in this application does not require the certification of a PE.

	Section			
A.2.4	Prior Conduct Certification	Y	Exhibit A- 2	
A.3	Public Disclosure Exemption Claims and Trade Secret Claims	XX		
A.3.1	No information Claimed Exempt from Public Disclosure	Y	Section A.3	
A.3.2	Trade Secrets Claims	NA		
A.3.3	Exempt, or Exempt In-Part Data Claims	NA		
A.3.4	Justification Letter	NA		
A.3.5	Privileged Information	NA		
A.4	Public Participation	XX		
A.4.1	General	XX		
A.4.1.1	Facility Mailing List	Y	Exhibit A-	
A.4.1.2	Identification of Repositories	Y	Section A.4.1.2	
A.4.1.3	Contents of Repository Public Notice	Y	Section A.4.1.3	
A.4.1.4	Documentation of Public Notice of Repositories	N		The application indicates that documentation will be submitted, but this reviewer has received no such documentation to date.
A.4.2	Notification of Permit Application Submittal	XX		

1				
	Section			
A.4.2.1	Contents of Permit Application Notice	NA		Not applicable to applications submitted for the sole purpose of post-closure or corrective action.
A.4.2.2	Application Placed in Repository	NA		
A.4.2.3	New Combustion Units	NΛ		
A.4.3	Initial RCRA Permits & Permit Renewals with a Significant Modification	XX		
A.4.3.1	Pre-Application Public Meeting	NA		Not applicable to applications submitted for the sole purpose of post-closure or corrective action.
A.4.3.2	Public Notice of Pre- Application Meeting	NA		
A.4.3.3	Content of Pre-application Meeting Notice	NA		
B	Facility Description	XX		
B.1	General Description	XX		
B.1.1	Operation of Facility	Y	Section B.1.1	
B.1.2	Process Flow Diagram	NA		Facility in post-closure.
B.1.3	Units	Y	Section B.1.3	
B.2	Topographic Map Requirements	XX		·
B.2.1	General Map Requirements	XX		

	Scotton (1997)			
B.2.1.1	Map of Area Extending 1 Mile Beyond the Property Boundary	Y	Figure B-1	
B.2.1.2	Map of Entire Facility and 1000' Out from the Property Line	Y	Figs B-3A, B-3B, and B-3C	
B.2.2	Additional Map Requirements for New Land Disposal Facilities	NΛ		Not a new Land Disposal Facility.
B.2.3	Legal Description	Y	Exhibit B-	
B.3	Location Standards	XX		
B.3.1	Seismic Standard	NA		No known active faults within 2 miles of facility.
B.3.2	Floodplain Standard	NA		Not in 100 year floodplain (due to Corps levee).
B.3.3	Facilities in the 100 Year Floodplain	XX		
B.3.3.1	Engineering Analysis of Hydrodynamic & Hydrostatic Forces	NA		
B.3.3.2	Structural or Engineering Study	NA		
B.3.3.3	Procedures to Remove Waste	NA		
B.3.4	Existing Facilities not in Compliance with Floodplain Requirements	NA		
B.4	Traffic Information	NA		Not required for post-closure permits (35 III. Adm. Code703.214).

	Section			
B.5	Operating Record	XX		
B.5.1	Contents of Operating Record	N		No operating record information provided. The permittee justifies this by saying none is required pursuant to 35 Ill. Adm. Code 703.214.
B.5.2	Installation of Tanks	NA		No tanks present or proposed at the facility.
C	Waste Characteristics	XX		
C.1	Chemical And Physical Analyses	XX		
C.1.1	General Chemical Information and Analyses	1	VIZ, Attach	No waste analysis plan is provided. The permittee indicates that Section C is not applicable to post-closure care, but indicates that The soil remediation Report includes a description and analytical reports regarding the wastes disposed in the SFP. Section S of the application indicates that this report is included as Attachment A of the post-closure plan. However, the post closure plan is missing Attachment A. Since none of Section C of the checklist is addressed in the application, the rest of Section C has been deleted from this review
D1	Containers	XX		
D1.1	Description of Containers	XX		
D1.1.1	General Information on Container Types	NA		No container storage is permitted at this site. Therefore, Section D.1 is not applicable. The rest of Section D1 of the Checklist has been deleted.
D2	Tank Systems	XX		
D2.1	Description of Tanks	XX		

	Seanon			
D2.1.1	Summary Table	NA		No tank storage is permitted at this site. Therefore, Section D2 is not applicable. The rest of Section D2 of the Checklist has been deleted.
D10	Miscellaneous Units	XX		·
D10.1	Description of Miscellaneous Units	NA		No miscellaneous units are permitted at this site. Therefore, Section D10 is not applicable. The rest of Section D10 of the Checklist has been deleted.
E	Groundwater Monitoring	XX		
E.1	Exemption from Groundwater Protection Requirements	NA		Section E of the checklist will be reviewed by the RCRA Groundwater Assistance Unit. The rest of Section E has been deleted from this review.
F	Procedures to Prevent Hazards	XX		
F.1	Security	XX		
F.1.1	Waiver form the Security Requirements	NA		Waiver not requested.
F.1.2	24-Hour Surveillance System	Y	Section F.1.2	
F.1.3	Barrier and Controlled Entry	Y	Section F.1.3	
F.1.4	Warning Signs	Y	Section F.1.4	
F.2	Inspection Schedule	XX		
F.2.1	Inspection Log .	. XX		

	Section			
F.2.1.1	Items Inspected	Y	Post- Closure Plan, Attachment B	
F.2.1.2	Types of Problems	Y	Section F.2.1.2	
F.2.1.3	Inspection Frequency	Y	Tanble F-1	
F.2.2	Repair Log	XX		
F.2.2.1	Contents of Repair Log	Y	Attachment C of Post- closure care plan.	
F.2.2.2	Repair Times	Y	Table F-2	
F.2.3	Container & Container Storage Area Inspection	NA		No container Storage is permitted.
F.2.4	Tank System Inspection	NA		No tank storage is permitted.
F.3	Equipment Requirements	XX		
F.3.1	Waiver from the Equipment Requirements	N		The permittee claims that the equipment requirements are not applicable because the facility is inactive.
F.3.2	Internal Communication	N		
F.3.3	External Communication	N		
F.3.4	Water for Fire Control	N		·
F.3.5	Testing & Maintenance of Emergency Equipment	XX		

	Seutin				
F.3.5.1	Equipment Testing	N			
F.3.5.2	Maintenance/calibration Schedule	N			
F.3.6	Aisle Space	N			
F.4	Preventive Procedures, Structures and Equipment	XX			
-F.4.1	Unloading Operations	N			The permittee claims that the Preventive Procedures, Structures and Equipment requirements are not applicable because the facility is inactive
F.4.1.1	Locations	N			
F.4.1.2	Structures & Equipment	N	Nox		
F.4.1.3	Procedures	N	\ (00	·
F.4.2	Run-Off Control	N	D,	1.0	31:09
F.4.3	Water Supplies	N	A	P	12 14: e
F.4.4	Equipment and Power Failure	N .	10	0/	aci
F.4.5	Personal Protection Equipment	N			
G.	Evaluation of Potential Hazards & Contingency Plan	XX			
G.1	Evaluation of Potential Hazards Report	N	Not need - No pot for off	ential -gte	The permittee claims that the Evaluation of Potential Hazards report is not required because the facility is inactive. (Pursuant to 703.214)

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	Control of the second of the s				
G.1.1	Executive Summary	N			
G.1.2	Facility Description	XX			
G.1.2.1	General Information	N	-		
G.1.2.2	Surrounding Area	N			
G.1.3	Chemical & Physical Properties of Wastes Managed at the Site	XX			
G.1.3.1	Waste Properties 0f Constituents in Wastes	N		1	
G.1.3.2	Identify Products of Incomplete Combustion (PICs)	N			
G.1.3.3	Appropriate Exposure Limit (AEL)	N		X	
G.1.3.4	Ranking of AELs	N			
G.1.4	Air Modeling	XX		7	
G.1.4.1	Air Model	N			
G.1.4.2	Limitations	N			
G.1.4.3	Justify Assumptions	N			
G.1.4.4	Input Data	N			
G.1.5	Evaluation/Assessment Report	N			
G.1.5.1	Scenarios	N			
G.1.5.2	Wastes	N			

	Section :	表 10 mm 10			
G.1.5.3	Results & Evaluation	N			
G.1.5.3.1	On-site & Off-site Effects	N			
G.1.5.3.2	The Area Affected	N			
G.1.5.3.3	The Maximum Extent	N		X	
G.1.5.3.4	The Time to Reach Maximum Extent	N	5		
G.1.5.3.5	Duration	N		(
G.1.5.3.6	Arrangements	N			
G.1.5.3.7	Evacuation Requirements	N			
G.2	Contingency Plan	XX			The permittee claims that a contingency plan for the closed hazardous waste management unit is not required because the facility is inactive. (Pursuant to 703.214) However, a general site contingency plan is provided as Attachment D to the application. This review is based on the general site contingency plan.
G.2.1	General Information	XX			
G.2.1.1	General Description of Site	N			
G.2.1.2	Facility Drawing	N			
G.2.1.3	Waste Types	N			The only discussion of waste provided is for leachate from Pond 1 landfill, which is not on this facility.
G.2.1.4	Surrounding Land Use	N			
G.2.1.5	Possible Hazards	N			

	J. Station			
G.2.1.6	Worst Case Scenario	·N		
G.2.1.7	Emergency Equipment	Y	Attachment D, Page 16.	
G.2.2	Emergency Coordinators	XX		
G.2.2.1	Identify Emergency Coordinators	Y	Attachment D, Page 5.	
G.2.2.2	Demonstrate Availability	N		
G.2.2.3	Authority to Commit Resources	N		The plan covers responsibilities, but does not indicate what resources are at the EC's disposal.
G.2.3	Assessment	XX		
G.2.3.1	Off-Site Impact	N		
G.2.3.2	Evacuation Determination	N		The application covers the possibility that evacuation may be necessary, but does not indicate how an evacuation decision would be made.
G.2.4	Implementation	XX		
G.2.4.1	When .	Y	Section G.2.4.1	
G.2.4.2	How	Υ	Section G.2.4.2	
G.2.5	Emergency Response Procedures	XX		
G.2.5.1	Identification of Materials Released	N		
G.2.5.2	Notification	Y	Section G.2.5.2	

	Section			es de	
G.2.5.2.1	Inform Employees	Y		Section G.2.5.2.1	
G.2.5.2.2	Notify local & State Agencies	Y		Section G.2.5.2.2	
G.2.5.2.3	Notification of Evacuation	Y		Section G.2.5.2.3	
G.2.5.2.4	Report Incident	Y		Section G.2.5.2.4	
G.2.6	Control Procedures	N			
G.2.6.1	Prevention of Recurrence or Spread of Fires, Explosions or Releases	N			
G.2.6.2	Monitoring	NΛ			
G.2.6.3	Containers	NA			
G.2.6.4	Tank Systems	NA			
G.2.6.4.1	Specify Procedures to Respond to Incident	NA			
G.2.6.4.2	Demonstrate that the Procedures meet 724.296	NΛ	·		
G.2.7	Evacuation Plan	XX			
G.2.7.1	Evacuation Signals	Y		Section G.2.7.1	
G.2.7.2	Evacuation Routes	N			
G.2.8	Post-Emergency Actions	XX			
G.2.8.1	Storage and Treatment of Released Material	N			

G.2.8.2	Management of Incompatible Materials	N		
G.2.8.3	Post-Emergency Equipment Maintenance	N		
G.2.9	Reporting Requirements	XX		
G.2.9.1	Post Emergency Response Actions	N		
G.2.9.2	Note in the Operating Record	N		
G.2.9.3	Written Report	N		
G.2.10	Coordination Agreement Requirements	XX		
G.2.10.1	Documentation of Agreements & Arrangements	N		
G.2.10.2	Coordination Agreements	N		
G.2.10.3	Facility Operations	N		
G.2.10.4	Familiarize Local Hospitals	N		
G.2.10.5	Primary Response Authority	Y	Contingenc y plan.	
G.2.10.6	Primary Evacuation Authority	Y	Contingenc y Plan.	,
H	Personnel Training	XX		
H.1	Training Program	XX		

	Scotion		(A)	
H.1.1	Training Director	N		Permittee indicates that no personnel training program is necessary. (pursuant to 703.214
H.1.2	Job Title – Job Description			
H.1.3	Relevance of Training to Job Position	N		
H.1.4	Outline of Training Program	XX		·
H.1.4.1	Training Content, Frequency and Technique	N		
H.1.4.2	Training for Emergency Response	N		
Н.2	Implementation of Introductory and Continuing Programs	XX		
H.2.1	Completion of Training	N		
H.2.2	Record Keeping	N		
I	Closure and Post- Closure Requirements	XX		
I.1	Closure Plan	NA		All units have gone through closure. Ther rest of section I.1 has been deleted from this review.
I.2	Post-Closure Plan	XX		
I.2.1	Identification of Units	Y	Application Section I.2.1	
1.2.2	Post-Closure Inspection Plan	XX		

	Section	01					
I.2.2.1	Items Inspected	Y	Application Section I.2.2.1				
I.2.2.2	Types of Problems	Y	Application Section I.2.2.2				
I.2.2.3	Inspection Frequency	Y	Table F-1		 		
I.2.2.4	Documentation of Inspection	Y	Application Section 1.2.2.4 and Attachment B of the Post-closure Plan.				
I.2.2.5	Repair Log	Y	Application Section I.2.2.5 and Attachment C of the Post-Closure Plan.				
I.2.2.6	Contents of Repair Log	Y	Application Section 1.2.2.6				
1.2.2.7	Repair Times	. Y	Table F-2.		 	 ****	
I.2.3	Post-Closure Monitoring Plan	Y	Application Section I.2.3				

	S. G. Communication of the Com	4		
I.2.4	Post-Closure Maintenance Plan	XX		
1.2.4.1	Procedures, Equipment & Material	N		No discussion of maintenance intervals, procedures, etc.
1.2.4.2	Rationale	N		No discussion of how it will be determined when maintenance is needed.
I.3	Survey Plat	XX		
I.3.1	Identify Units/Areas	Y	Volume 2, Appendix K	
I.3.2	Note on Plat	Y	Volume 2, Appendix K	
1.3.3	Certification of Plat	Y	 Volume 2, Appendix K	
1.3.4	Recording of Survey Plat	Y	Volume 2, Appendix K	
1.3.5	Existing Facilities with Closed Disposal Units	Y	Volume 2, Appendix K	
I.4	Notice in Deed and Certification	XX		
I.4.1	Notice in Deed	N		No notice in deed is provided. Since this is a renewal permit, the notice should have been done shortly after the original permit was issued.

I.4.2	Certification of Notification	· N		No certification is provided. Since this is a renewal permit, the notice should have been done shortly after the original permit was issued.
I.4.3	Existing Facilities with Closed Disposal Units	N		No copy of notice or the deed is provided. Since this is a renewal permit, the notice should have been done shortly after the original permit was issued.
1.5	Closure Cost Estimate	NA		Closure has already been completed.
1.6	Financial Assurance Mechanism for Closure	NA		Closure has already been completed.
1.7	Post Closure Cost Estimate	XX		
I.7.1	Third Party Costs	N	Volume 2, page 9, and table 3.	No indication is given that the estimates are based on third party costs.
I.7.2	Unit Costs	Y	Volume 2, Table 3	
I.7.3	Annual Cost Estimate	Y	Volume 2, Table 3	
I. 7 .4	Post-Closure Cost Estimate	Y	Volume 2, Table 3	
I.7.5	Annual Updates	N		No provision is made for annual updates.
1.8	Financial Assurance Mechanism for Post- Closure Care			
I.9	Liability Requirements	XX		

	Section			
I.9.1	Mechanism for Post- Closure Care	Y	Volume 2, Attachment E.	
1.9.2	Request for Variance	NA		Variance not requested.
I.10	State Mechanisms	NA		
J	Other Federal Laws	NA		
AA	Air Emission Standards for Process Vents	NA		No process vents.
ВВ	Air Emissions Standards for Equipment Leaks	NA		No applicable equipment.
CC	Emission Standards	NA		No applicable units.

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ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 JAMES R. THOMPSON CENTER, 100 WEST RANDOLPH, SUITE 11-300, CHICAGO, IL 60601

ROD R. BLAGOJEVICH, GOVERNOR

RENEE CIPRIANO, DIRECTOR

217/524-3300

July 8, 2003

CERTIFIED MAIL 7001 2510 0002 5277 3732

BP Products of North America Inc. Attn: Stephen A. Elbert, President Group Environmental Management Company 801 Warrenville Road, Suite 800 Lisle, Illinois 60532

Re:

1191150001 - Madison County

BP Products of North America Inc., former Wood River Refinery Main Plant

ILDILD980700967

RCRA Permit Log No. B-147R

Dear Mr. Elbert:

The Illinois Environmental Protection Agency has reviewed Part B of the RCRA permit application for the South Flare Pit dated May 8, 2003 and received May 9, 2003 for the above-referenced facility. A list of the deficiencies identified during this Initial Completeness Review is included in the attached Notice of Deficiency (NOD).

Each of the deficiencies must be addressed before the Illinois EPA can begin the technical review of your permit application. Failure to provide financial assurance in accordance with the requirements of 35 IAC Parts 703 and 724 with the resubmittal may result in denial of the application for permit. Your response must be submitted in quadruplicate and postmarked no later than September 8, 2003. The response should be in a format which allows incorporation of the new information into the appropriate sections of your application. To allow for a proper review of this new information, the location of the response to each deficiency should be identified in a list cross-referencing these items. Each revised page or drawing must have the revision date identified on them for tracking purposes.

A certification identical to that outlined in 35 Ill. Adm. Code 702.126 must accompany your submission. The original and three copies of the new information and certification should be submitted to the following address:

Illinois Environmental Protection Agency Bureau of Land -- #33 Permit Section 1021 North Grand Avenue East Post Office Box 19276 Springfield, Illinois 62794-9276

If you have any questions regarding this subject, feel free to contact Mark L. Crites of my staff at 217/524-3300.

Sincerely,

Joyce L. Munie, P.E. Manager, Permit Section

Bureau of Land

JLM:MLC:mls\031771s.doc

Enclosure – Initial Completeness Review Notice of Deficiency

cc: Harriet Croke, USEPA Region V, w/enclosure
Jim Blough, USEPA Region V

Greg Jevyak, Group Environmental Management Company Dennis A. Kasner, Project Manager, URS Corporation Initial Completeness Review
Notice of Deficiency
BP Products of North America, Inc
Former Wood River Refinery
IEPA ID Number: 1191150001
Log Number B-147R

The following deficiencies were noted during the Initial completeness review. This document is formatted with the applicable section from the RCRA Part B Permit Application Decision Guide, followed by any review-specific information (indicated by an arrow) as necessary.

A.2.3 Technical Information Certification: 703.182, Illinois Professional Engineering Act

Certain technical data, such as design drawings, specifications and engineering studies, must be certified (sealed) by a qualified Professional Engineer who is licensed to practice in the State of Illinois in accordance with Ill. Rev. Stat., par. 5101, Sec. 1 and par. 5119, Sec. 13.1. Work required by your application or the regulations may also be subject to other laws governing professional services, such as the Illinois Professional Land Surveyor Act of 1989, the Professional Engineering Practice Act of 1989, the Professional Geologist Licensing Act, and the Structural Engineering Licensing Act of 1989. All work that falls within the scope and definitions of these laws must be performed in compliance with them. The Illinois EPA may refer any discovered violation of these laws to the appropriate regulating authority.

No Technical Information Certification was provided. The application indicates that the information provided does not require the certification of a Professional Engineer. However, a RCRA Permit application is a technical document by its very nature. Various professional disciplines were involved in its preparation, and those responsible for ensuring that the technical information presented is accurate must certify to that effect.

A.4.1.4 Documentation of Public Notices of Repositories:

Provide documentation that the public notices of the repositories were completed as required by the regulations. These notices must be made no later than the date the permit application is submitted to the Illinois EPA. Specifically:

- Provide a copy of the letter sent to individuals on the approved facility mailing list. Indicate the date the letter was sent, and the revision date of the mailing list used for the mailings.
- Provide either the publisher's certification stating that it published the notice as a display ad once per week for three consecutive weeks, or provide newspaper tear sheets containing the display ad for each date the ad ran. [This information may be submitted separate from the original permit application if it is not evaluated on the date the application is submitted to the Illinois EPA.]
- The application indicates that such documentation will be submitted separately no later than the date the permit application is submitted to Illinois EPA. However, no such documentation has been received by the Agency.

B.5.1 Contents of Operating Record:

The application must include procedures to record information about the facility described in 724.173 in the operating record as it becomes available:

Page I of 8

- A description of the quantity of each hazardous waste received and the method(s) and date(s) of its treatment, storage, or disposal at the facility as required by 703, Appendix A,
- The location and quantity of each hazardous waste managed or disposed,
- The results of waste analyses and waste determinations. For example, a Waste Receipt Analysis Report similar to Table 4-20 in the USEPA WAP guidance EPA/530-SW-84-012 could be used to track the acceptance of wastes received from off-site.
- Any refusals of State or local authorities to coordinate emergency services with the facility,
- Reports and details of all incidents where the Contingency Plan was implemented,
- Records of inspections,
- Monitoring, testing, or analytical data and corrective action data where required,
- For off-site facilities, notices to generators per 724.112(b),
- All closure and post-closure cost estimates,
- Annual certification, by permittee, that the permittee has a program in place to reduce the volume and toxicity of hazardous waste generated,
- Records of each shipment of hazardous waste placed in a land disposal unit under an extension of the effective dates of the LDRs, and
- Copy of the notice (on-site facilities only need the information in the notice) and the certification, and demonstration required of the generator by 728.107 or 728.108.

Note: Separate documents can be used as the operating record provided the requirements of 724.173 are satisfied.

No information is provided as to how the Operating Record will be maintained. The application indicates that no Operating Record is required for post-closure permits. However, much of the information (location and quantity of waste disposed, results of waste analysis, refusals of authorities to coordinate emergency services, reports regarding contingency plan implementation, inspection records, monitoring data, and post-closure cost estimates) that would normally be kept in an Operating Record is applicable to post-closure care. Please indicate how this information will be recorded and maintained at the facility.

F.3 Equipment Requirements: 703.183, 724.132, 724.133, 724.134, 724.135

All facilities must be equipped with the following equipment unless the applicant can demonstrate that none of the hazards posed by waste handled at the facility could require that particular kind of equipment. Document that the facility possesses the equipment listed below and provide a description of its capabilities, capacity, etc., as appropriate. Note: Identify the location of this equipment on a drawing included with the Contingency Plan.

This section is not addressed. The application indicates that it is not applicable because the facility is not active. However, some of this equipment is indicated as present at the facility in the Contingency Plan. Since this equipment is crucial to implementation of the Contingency Plan, it should be described in this section.

G.2 Contingency Plan: 703.183(t), 703.183(g), 724.137, 724.150 through 724.156

The Contingency Plan must be designed to minimize hazards to human health or the environment from fires, explosions or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil or surface water. The provisions of this plan must be carried out **immediately** whenever there is a fire, explosion or release of hazardous waste or hazardous waste constituents that could threaten human health or the environment.

The Contingency Plan must be a complete stand alone document. Therefore, all figures and other information referenced in the Contingency Plan must be included as part of the plan. This is necessary because the Contingency Plan is intended to be a document that will actually be used in an actual emergency situation and will be sent to local fire and police departments, hospitals, and emergency response agencies. Thus, all the necessary information must be readily available in it.

The Contingency Plan serves two main functions. It specifies the procedures the facility emergency coordinator (EC) needs to follow when responding to an incident, and it identifies the conditions the local and state agencies may encounter when responding to an emergency at the facility. That is, it identifies both the hazards at the facility, and the facility's capabilities to respond to those hazards.

The applicant needs to utilize the information developed above in Section G.1 above to develop the Contingency Plan. Specifically, this information can be used to assess emergency situations and develop emergency response

The application indicates that no Contingency Plan is necessary because the facility is inactive. A general site Contingency Plan is provided as Attachment D in Volume 2 of the application. The following portions of the Decision Guide were not addressed by the general site contingency plan:

G.2.1.1 General Description:

Provide a general description of the operations and activities carried out at the site.

G.2.1.2 Facility Drawing:

Provide a scale drawing of the facility that shows the following:

- All buildings and roadways.
- Areas where hazardous waste is managed (generated, transported, transferred, accumulated, stored, treated, or disposed). Identify those areas used to manage ignitable, reactive, corrosive, and incompatible wastes.
- The locations of communications, alarms, fire protection, spill control, PPE, and other emergency equipment.

G.2.1.3 Waste Types:

Identify (e.g. list) all wastes managed at the facility. Identify the characteristics of each waste (ignitable, reactive, corrosive, toxic, or incompatible), and describe how they are managed in each area shown on the facility drawing.

G.2.1.4 Surrounding Land Uses:

Provide a description of the area surrounding the facility. Provide a USGS topographic map that shows the facility and the following features within 1,000 feet of the facility property line:

- The topography
- · Roads
- Population centers. Identify all schools, factories, hospitals, day care facilities, nursing homes, apartment complexes, residential areas, etc.

G.2.1.5 Possible Hazards:

Identify the possible hazards that may result from a release, fire or explosion (e.g., the effects of any toxic, irritating or asphyxiating gases that could be generated, the effects of any hazardous surface water run-off from water or chemical agents used to control fire, and heat-induced explosions).

G.2.2.2 Availability and Responsibility of Emergency Coordinators:

Demonstrate that at least one emergency coordinator will be on the facility premises, or on call (i.e. available to respond to an emergency by reaching the facility within a short period of time) at all times.

G.2.2.3 Authority to Commit Resources:

The application must include a statement that clearly gives the Emergency Coordinator authority to commit the resources necessary to implement the Contingency Plan and to stop processes or operations at the facility in the event of an emergency. The ability of the EC to commit resources or shut down certain operations in an emergency must not be contingent on the EC gaining approval to do so from a supervisor during the emergency.

G.2.3 Assessment:

Describe the information and procedures the EC will use during an emergency to assess the possible hazards to human health or the environment resulting from the emergency. This assessment should be based on, and use, the information developed in Section G.1. The assessment must consider both the direct and indirect effects of the release, fire or explosion (e.g., the effects of any toxic, irritating or asphyxiating gases that could be generated, or the effects of any hazardous surface water run-off from water or chemical agents used to control fire and heat-induced explosions).

G.2.3.1 Off-Site Impact:

Identify the information and procedures the EC will use during an emergency to determine if a release, fire, or explosion could threaten human health or the environment outside the facility. An "off-site impact" is any situation in which an AEL is found beyond the facility property line.

G.2.3.2 Evacuation Determination:

Identify the information and procedures the EC will use to determine if evacuation of local areas may be advisable.

G.2.5 Emergency Response Procedures: 724.156

It is recommended that important names, phone numbers, and key emergency response procedures be placed on the very first page of the Contingency Plan in order to assist the EC during the initial phases of an actual emergency response.

G.2.5.1 Identification of Materials Released:

Describe the information and procedures the EC will use to identify the compound(s) involved in the spill, fire, or explosion; the exact source, amount and aerial extent of any material released during the emergency.

G.2.6 Control Procedures: 724.152(a), 724.156

Describe the procedures facility personnel will take to control a release, fire, or explosion.

G.2.6.1 Prevention of Recurrence or Spread of Fires, Explosions, or Releases:

Describe the steps the EC will take during an emergency to ensure that fires, explosions, or releases do not occur, reoccur, or spread to other hazardous waste at the facility. These measures must include, where applicable, stopping processes and operations, collecting and containing release waste, and removing or isolating containers.

G.2.7.2 Evacuation Routes :

Identify the primary and alternate evacuation routes and the location(s) where employees will meet after evacuating the facility on the scale drawing of the facility. Describe how these routes and locations were chosen.

G.2.8.1 Storage and Treatment of Released Material:

Describe the steps that will be taken immediately after an emergency to provide for the treatment, storage, or disposal of recovered waste, contaminated soil or surface water, or any other material that results from a release, fire, or explosion at the facility.

G.2.8.2 Management of Incompatible Waste:

Describe procedures that will be used to prevent incompatible waste from being treated, stored or located in the affected areas until clean-up procedures are completed.

G.2.8.3 Post-Emergency Equipment Maintenance:

Describe procedures followed to ensure that all emergency equipment listed in the contingency plan is cleaned and fit for its intended use before operations are resumed.

G.2.9 Reporting Requirements: 724.156(i) and (j)

Describe the procedures that will be utilized to meet the following requirements:

G.2.9.1 Post-Emergency Response Actions:

Notify the Illinois EPA's Bureau of Land (BOL) Permit Section, Regional Office, and the appropriate state and local agencies that clean-up operations have been completed and that the emergency equipment has been cleaned and is fit for its intended use.

G.2.9.2 Note in the Operating Record:

The application must document that the operating record for the facility will record the time, date and details of any incident that requires implementation of the contingency plan.

G.2.9.3 Written Report:

The application must document that the owner/operator will submit a written report to the Illinois EPA's BOL Permit Section, Planning and Reporting Section, and Regional Office within 15 days after the incident has occurred which includes the following information:

- Name, address and telephone number of the owner or operator;
- Name, address and telephone number of the facility;
- Date, time and type of incident (e.g., fire, explosion);
- Name and quantity of material(s) involved;

- The extent of injuries, if any;
- An assessment of actual or potential hazards to human health or the environment, where this is applicable; and
- Estimated quantity and disposition of recovered material that resulted from the incident.

G.2.10 Coordination Agreement Requirements: 724.137, 724.152(c), 724.153(b)

A facility applying for a RCRA permit is required to attempt to develop emergency plans and coordination agreements with the appropriate state and local emergency response agencies. The facility will also need to conduct periodic meetings with these agencies to review the agreements and the facility's operations and to discuss any change in the facility or its contingency plan.

G.2.10.1 Documentation of Agreements & Arrangements:

For each of the emergency response entities identified in the Contingency Plan, provide written documentation of one of the following:

- An agreement was reached with the emergency response agency,
- · An attempt to make an arrangement with the emergency response agencies was made, or
- The emergency response agency refused to enter into an arrangement with the facility.

G.2.10.2 Coordination Agreements:

Describe the arrangements agreed to by the local police and fire departments, hospitals, contractors, and state and local emergency response teams to coordinate emergency services. The agreements must be sufficient to define the responsibilities of each entity in the event that the contingency plan is implemented.

G.2.10.3 Facility Operations:

Document that the facility has made arrangements to familiarize police, fire departments and emergency response teams with the layout of the facility, properties of hazardous wastes handled at the facility and associated hazards, places where facility personnel would normally be working, entrances to and roads inside the facility, and the possible evacuation routes and evacuation meeting locations.

G.2.10.4 Familiarize Local Hospitals:

Document that the facility has made arrangements to familiarize local hospitals with the properties of the hazardous waste handled at the facility and the types of injuries or illnesses that could result from fires, explosions or releases at the facility.

H.1 Training Program

No Training Program is provided. Section H.1 of the application indicates that a Training Program is not necessary for post-closure facilities pursuant to 35 Ill. Adm. Code 703.214. While Illinois EPA agrees that most of the training requirements applicable to an operating facility are not applicable to a closed facility, the permit application should, at a minimum, address how employees will be trained to ensure that permit requirements are met. This should, at a minimum, include inspection, monitoring, maintenance, contingency procedures, reporting and maintaining the operating record.

I.2.4.1 Procedures, Equipment & Materials:

Describe the preventive and corrective maintenance procedures, equipment requirements and materials that will be needed during post-closure. Include the following items in the maintenance plan, as applicable:

- Repair of security control devices;
- Erosion damage repair;
- · Correction of settlement, subsidence and displacement;
- · Mowing, fertilization and other vegetative cover maintenance;
- Repair of run-on and run-off control structures;
- · Leachate removal system maintenance; and
- Well replacement.
- > No discussion is provided regarding actual maintenance procedures, maintenance intervals, etc.

I.2.4.2 Rationale:

Describe the rationale used to determine the need for corrective maintenance activities.

> No discussion is provided regarding how it will be determined when corrective maintenance is needed.

I.4.1 Notice in Deed:

Record a notation on the deed to the facility property, or on some other instrument which is normally examined during title search that will in perpetuity notify any potential purchaser of the property that:

- The land has been used to manage hazardous waste.
- Use of these areas is restricted.
- A survey plat and record of the type, location and quantity of material in the disposal units or areas have been filed with the Illinois EPA, the County Recorder, and any local zoning authority or authority with jurisdiction over local land use.
- For hazardous wastes disposed prior to January 12, 1981, identify the type, location and quantity of the hazardous waste to the best of the owner or operator's knowledge and in accordance with any records the owner or operator has kept.
- > No notice in deed is provided. Since this is a renewal permit, this notice would have been required when the original permit was issued. A copy of the notice recorded at that time should be included in the permit application.

I.4.2 Certification of Notification:

Submit a certification, signed by the owner or operator, that the owner or operator has properly recorded the notification required in I.4.1, including a copy of the document in which the notification has been placed, to the Illinois EPA.

> No certification or notice in deed is provided. Since this is a renewal permit, this notice would have been required when the original permit was issued. A copy of the notice recorded at that time should be included in the permit application.

I.4.3 Existing Facilities with Closed Disposal Units:

If the facility includes a RCRA disposal unit that is already certified closed, provide a copy of the notice for that unit and a copy of the document in which the notification was placed, with the RCRA permit application.

> No notice in deed is provided. Since this is a renewal permit, this notice would have been required when the original permit was issued. A copy of the notice recorded at that time should be included in the permit application.

I.7.1 Third Party Costs:

Cost estimates must be based on third party costs and cannot include salvage value for sale of hazardous wastes, facility structures or equipment.

No indication is given in the estimate as to the basis of the estimate. If the estimates were based on third party costs, indicate this, and provide a reference to where the unit costs were obtained. If the estimates were not based on third-party costs, please revise the estimates, and again, provide references for the unit costs used in the estimates.

I.7.5 Annual Updates:

The cost estimate must be updated annually using an inflation factor or by recalculating the maximum cost of closure in current dollars. Existing facilities should provide a copy of the most recent cost estimate that was provided to the IEPA.

> No provisions are made for annual updates of the post-closure cost.



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 JAMES R. THOMPSON CENTER, 100 WEST RANDOLPH, SUITE 11-300, CHICAGO, IL 60601

RENEE CIPRIANO, DIRECTOR

217/524-3300

January 29, 2003

CERTIFIED MAIL 7002 2030 0001 1873 4592

Greg Jevyak BP Products North America Inc. 301 Evans Avenue P.O. Box 167 Wood River, Illinois 62095-0167

Re:

1191150002 -- Madison County

BP Products/Main Plant Log No. B-147-CA-40 Received: January 24, 2003

RCRA Permit

Dear Mr. Jevyak:

This is in response to your January 21, 2003 submittal regarding certain RCRA corrective action activities at the BP Products/Main Plant facility in Wood River, Illinois. The subject facility was issued a RCRA permit by Illinois EPA on September 30, 1992 (Log No. B-147). Among other things, this permit required BP to conduct corrective action, as necessary, on 21 solid waste management units and 9 Product Release Sites. On February 15, 2002 Illinois EPA approved a request to expand the corrective action program to the entire facility.

A substantial amount of investigative and remedial activities have been completed to date at this facility. On August 13, 2002 Illinois EPA issued a letter indicating that, subject to certain conditions and modifications, No Further Action was necessary to address a portion of the above-referenced facility known as "Area 2" (A map showing the location of this parcel within the facility is provided as Attachment A to this letter). One of the conditions of this letter was that BP needed to submit an institutional control to place certain restrictions on the property.

Your January, 2003 submittal contained a draft Environmental Land Use Control (ELUC) which would be used as an institutional control to place certain restrictions on future activities in Area 2 as requested in Illinois EPA's August 13, 2002 letter. Illinois EPA has completed its review of this submittal and it is hereby approved subject to the following conditions and modifications:

1. The proposed Environmental Land Use Control (ELUC) for a 43.17 acre parcel located at 301 Evans Avenue in Wood River, Illinois in Madison County (PIN Nos. 19-1-08-27-10-101-001.001; 19-1-08-27-14-301-001.001; and 19-1-08-27-14-301-001.002) is hereby

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approved. A legal description of this facility is provided as Attachment B to this letter. The final ELUC filed with the Office of the Recorder or Registrar of Titles for Madison County must include a dated and notarized signature of the property owner.

- 2. The ELUC approved herein places the following restrictions on the subject property:
 - a. All groundwater, including the perched groundwater, under the Property shall not be used as a potable supply of water, and any contaminated groundwater and/or soil that is removed, excavated, or disturbed from the Property must be handled in accordance with all applicable laws and regulations;
 - b. The Property shall not be used for Residential use. The Property shall be used solely and exclusively for "industrial/commercial property" use as it is defined in 35 Ill. Adm. Code 742;
 - c. Any excavation and subsurface construction work on the Property shall be conducted in accordance with a site health and safety plan designed to restrict direct worker exposure to impacted soils on the Property, and all the construction workers shall be equipped with appropriate personal protective equipment as required and specified by the site health and safety plan;
 - d. The soil within the Property shall remain in place, except where necessary to remove it for construction activities;
 - Soil excavated during construction/demolition/excavation activities within the e. Property must be evaluated to determine if it is contaminated. This determination shall be made by a visual inspection and by subjecting the soils to a field screening test for volatile organic compounds ("VOCs"). Soil shall be considered "contaminated" if (1) there is a visual discoloring of the soil indicative of hydrocarbon product; or (2) the field screening test detects the presence (i.e., pH) readings >100 units) of VOCs in soil. Soils exhibiting potential contamination based on the visual or field screening will either be sampled for VOC and SVOC analysis or considered contaminated. If laboratory analytical data indicates constituents in soil are less than the Illinois EPA approved site specific remediation objectives ("ROs") developed for the Property then the soils will be considered to be not contaminated for reuse on the former BP Refinery Main Plant Facility, which is shown in Attachment A. If the soils are less than the site specific ROs but greater than residential standards they will be considered contaminated if transported off-site.

- (i) If the soil is found to be contaminated, then it must be sent off site for disposal as a special waste in accordance with 35 Ill. Adm. Code, Subtitle G: Waste Disposal.
- (ii) If the soil is uncontaminated, as determined by visual inspection and field screening, then it may be used as clean fill in other areas of the former BP Refinery Main Plant Facility. However, procedures must be in place to ensure that this material remains on the former BP Refinery Main Plant Facility and is not to be transported off site, unless it is transported off site as a special waste in accordance with 35 Ill. Adm. Code, Subtitle G: Waste Disposal.
- (iii) Documentation of all these activities must be placed in the facility's operating records.
- f. The two areas of the Property which are identified in Attachment C to this letter require an engineered barrier to restrict exposure to the soils beneath the barrier. This barrier must be properly maintained as an engineered barrier to restrict exposure to the soils beneath the barrier. Prior to commencement of any future excavation and/or construction in or near the areas containing the engineered barriers, a safety plan for these areas is required that is consistent with NIOSH Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities; OSHA regulations, particularly in 29 CFR 1910 and 1926; state and local regulations; and other U.S. EPA guidance as provided. At a minimum, the plan should address possible worker exposure if any future excavation and construction activities occur within the contaminated soil. Any contaminated soil removed, or excavated form, or disturbed at the areas containing the engineered barriers must be handled in accordance with all applicable laws and regulations.
- 3. Within forty-five days of the date of the this letter, the ELUC approved herein must be fully executed, notarized and recorded in the chain of title for the subject property in the Office of the Recorder or Registrar of Titles for Madison County. The approved ELUC will not become effective until officially recorded in the chain of custody for the subject property.
- 4. Within 30 days after filing the approved ELUC in accordance with Condition 3 above, a certified true copy of the filed ELUC, along with certification for the Office of the Recorder or Registrar of Titles for Madison County that the ELUC was properly filed, must be submitted to Illinois EPA.

- 5. Failure to comply with the limitations or requirements of an ELUC may result in voidance of an Illinois EPA no further action determination in accordance with the program under which the determination was made. The failure to comply with the limitations or requirements of an ELUC may also be grounds for an enforcement action pursuant to Title VIII of the Illinois Environmental Protection Act.
- 6. The limitations or requirements of the ELUC apply in perpetuity or until:
 - a. The Illinois EPA issues a new no further action determination approving modification or removal of the limitation/requirement; and
 - b. A release or modification of the land use limitation is filed on the chain of title for the property that is the subject of the ELUC.
- 7. At no time shall this site be used in a manner inconsistent with the land use limitations established in the approved ELUC, unless: (1) attainment of objectives appropriate for the new land use is achieved, and (2) a new no further action determination is obtained from Illinois EPA and subsequently recorded in accordance with 35 Ill. Adm. Code 742.
 - a. Requests to release or modify an ELUC must be formally requested in writing from Illinois EPA as a: (1) request to amend the certification of closure; or (2) a permit modification request. Sufficient information must be provided in these requests to demonstrate that the requested change meets all the requirements of 35 IAC 742.
 - b. Any final approval by Illinois EPA of a request to release or modify an ELUC must be filed with the chain of title for the subject facility.
- 8. In addition to the recording requirements outlined above, the facility must submit certification that plugging and abandonment of groundwater monitoring wells has been carried out in accordance with the approved procedures to the Illinois EPA at the address below within thirty (30) days of the date that the wells are plugged and abandoned.

Illinois Environmental Protection Agency Bureau of Land - #33 Permit Section 1021 North Grand Avenue East Post Office Box 19276 Springfield, Illinois 62794-9276 Mr. Greg Jevyak Log No. B-147-CA Page 5

Within 35 days of the date of mailing of the Illinois EPA's final decision, the applicant may petition for a hearing before the Illinois Pollution Control Board to contest the decision of the Illinois EPA. However, the 35-day period for a hearing may be extended for a period of time not to exceed ninety days by written notice provided to the Board from the applicant and the Illinois EPA within the 35-day initial appeal period.

Work required by this letter, your submittals or the regulations may also be subject to other laws governing professional services, such as the Illinois Professional Land Surveyor Act of 1989, the Professional Engineering Practice of 1989, the Professional Geologist Licensing Act, and the Structural Engineering Licensing Act of 1989. This letter does not relieve anyone from compliance with these laws and the regulations adopted pursuant to these laws. All work falling within the scope and definitions of these laws must be performed in compliance with them. The Illinois EPA may refer any discovered violation of these laws to the appropriate regulating authority.

If you have any questions regarding the groundwater-related aspects of this letter, please contact Ryan Bennett at 217/558-2150. Questions regarding other aspects of this project should be directed to James Moore at 217/524-3295.

Sincerely,

Joyce L. Munie, P.E.

Manager, Permit Section

Bureau of Land

JLM:JKM:mls\033434s.doc

Attachments: A -Main Plant Layout Map

B - Legal Description of Area 2

C-Area 2 Layout Map

cc: Janice M. McLain

Dennis Kasner



Main Plant Land Reuse Parce 5

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Attachment A

- Note

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B-147-CA-40 Attachment B (1/2)

PIN NO. 19-1-08-27-10-101-001.001 19-1-08-27-14-301-001.001 19-1-08-27-14-301-001.002

Exhibit A

The subject property is located in the City of Wood River, Madison County, State of Illinois, commonly known as 301 Evans Avenue, Wood River, Illinois and more particularly described as:

LEGAL DESCRIPTION AND REAL ESTATE TAX INDEX OR PARCEL # (PURSUANT TO 742. 1010(D)(2))

A tract of land in the Southeast Quarter of the Northwest Quarter and in the Northeast Quarter of the Southwest Quarter of Section 27, Township 5 North, Range 9 West of the Third Principal Meridian, Madison County, Illinois, described as follows:

Commencing at southeast corner of the Southeast Quarter of the Northwest Quarter of Section 27, Township 5 North, Range 9 West: thence North 87° 13' 15" West, along the south line of said Ouarter Ouarter Section, a distance of 60.11 feet to the west right of way line of Sixth Street (Old Alton-Edwardsville Road, 60 feet wide). the POINT OF BEGINNING of the tract herein described; thence South 00° 41' 06" West, along said west right of way line, a distance of 3.37 feet; thence South 00° 11' 08" East, continuing along said west right of way line, a distance of 537.69 feet; thence North 88° 55' 51" West a distance of 511.68 feet; thence South 01° 17' 38" East a distance of 287.59 feet; thence South 82° 51' 37" West a distance of 267.69 feet; thence North 00° 37' 37" West a distance of 862.36 feet; thence North 00° 23' 02" East a distance of 205.96 feet; thence South 63° 47' 13" East a distance of 67.39 feet; thence North 00° 18' 42" West a distance of 533.37 feet; thence North 07° 12' 26" West a distance of 32.06 feet: thence North 20° 48' 32" West a distance of 36.49 feet; thence North 33° 45' 54" West a distance of 36.12 feet; thence North 54° 50' 03" West a distance of 33.22 feet; thence North 88° 59' 50" West a distance of 233.69 feet; thence North 08° 34' 18" East a distance of 210.75 feet; thence North 01° 07' 40" East a distance of 324.73 feet; thence South 88° 13' 21" East a distance of 719.43 feet; thence South 73° 53' 06" East a distance of 103.38 feet; thence South 84° 54' 03" East a distance of 100.13 feet; thence South 33° 47' 40" East a distance of 83.60 feet; thence South 00° 41' 06" East a distance of 1242.50 feet to the point of beginning, containing 36.91 acres

and

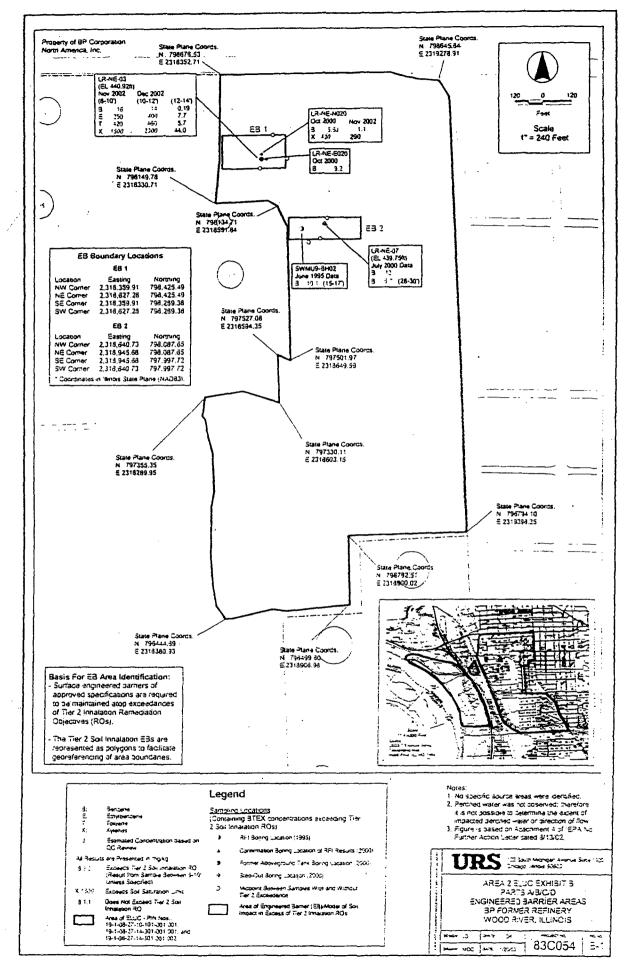
A tract of land in the Southeast Quarter of the Northwest Quarter and in the Northeast Quarter of the Southwest Quarter of Section 27, Township 5 North, Range 9 West of the Third Principal Meridian, Madison County, Illinois, described as follows:

Commencing at southeast corner of the Southeast Quarter of the Northwest Quarter of Section 27, Township 5 North, Range 9 West; thence North 87° 13′ 15″ West, along the south line of said Quarter Quarter Section, a distance of 60.11 feet to the west right of way line of Sixth Street (Old Alton-Edwardsville Road, 60 feet wide); thence South 00° 41′ 06″ West, along said west right

B-147-CA-40 Attachment B (2/2)

of way line, a distance of 3.37 feet; thence South 00° 11' 08" East, continuing along said west right of way line, a distance of 537.69 feet; thence North 88° 55' 51" West a distance of 511.68 feet; thence South 01° 17' 38" East a distance of 287.59 feet; thence South 82° 51' 37" West a distance of 267.69 feet to the POINT OF BEGINNING of the tract herein described; thence North 85° 28' 20" West, a distance of 66.31 feet; thence South 76° 05' 07" West a distance of 176.24 feet; thence North 86° 57' 09" West a distance of 19.35 feet; thence North 32° 52' 02" West a distance of 68.25 feet; thence North 09° 08' 23" West a distance of 79.65 feet; thence North 00° 01' 05" West a distance of 331.70 feet; thence North 10° 17' 24" East a distance of 94.49 feet; thence North 01° 16' 11" West a distance of 140.22 feet; thence North 14° 34' 25" West a distance of 157.07 feet; thence North 08° 34' 56" East a distance of 80.46 feet; thence North 83° 50' 58" East a distance of 167.06 feet; thence South 70° 15' 17" East a distance of 153.53 feet; thence South 00° 37' 37" East a distance of 862.36 feet to the point of beginning, containing 6.26 acres.

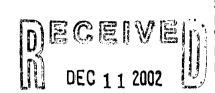
PIN NO. 19-1-08-27-10-101-001.001 19-1-08-27-14-301-001.001 19-1-08-27-14-301-001.002



14D 930 700 969 WM

Group Environmental Management Company

Gregory S. JevyakEnvironmental Business Manager



301 Evans Avenue P.O. Box 167 Wood River, II 62095-0167 Phone (618) 254-9074 Fax (618) 254-8718

December 5, 2002

DIVISION FRONT OFFICE Weste, Pesticides & Toxics Division U.S. EPA - REGIOM 5

Phyllis Reed, Acting Director United States Environmental Protection Agency – Region 5 Waste, Pesticides and Toxics Division 77 West Jackson Blvd Chicago, Illinois 60604-3590

Subject:

Former BP Amoco Wood River Refinery - Main Plant

Request for Class 3 Permit Modification of RCRA Part B Permit

RCRA Permit #147 (Issued 9/30/93)

Dear Mrs. Reed:

The attached is a Public Notice that appeared in the *Alton Telegraph* on Wednesday, December 4, 2002. It was submitted as part of the requirement for the above referenced permit modification request in accordance with 35 Illinois Administrative Code Section 703.283.

Upon the conclusion of the 60-day public comment period described, the Illinois Environmental Protection Agency (Agency) will take appropriate action concerning the possible approval of the modification request. Please contact the Agency representative referenced in the Public Notice with any comments you may have on the proposed permit modification.

Sincerely,

Gregory S. Jevyak

Environmental Business Manager

Attachment

Public Notice

BP (formerly Amoco) has requested a Class 3 Permit Modification of the RCRA Part B Permit for the former BP Wood River Refinery (Wood River, Illinois). BP is requesting modification of the permit to reflect that the North Cell of Spray Pond 1 (NC-SP1) has now been "closed by removal." The NC-SP1 is a surface impoundment that is approximately 3.5 acres in size. The requested modification would allow post-closure activities for the NC-SP1 to cease based on BP's demonstration that all hazardous waste and contaminated residues associated with this unit have been removed and disposed of off-site. The RCRA Part B Permit for the site (#147) was issued by the Illinois Environmental Protection Agency (Agency) on September 30, 1993.

60-Day Comment Period

Commencing on the date of this notice, a 60-day comment period is in effect regarding the above-referenced Permit Modification Request, in accordance with 35 IAC 703.283(e). The name and address of the Agency contact to whom comments must be submitted is provided below.

Public Meeting

A public meeting to be staffed by BP personnel will be held on Thursday, December 19, 2002, at 10:00 am at the Roundhouse, 633 N. Wood River Avenue, Wood River, Illinois.

Local Repository

Appropriate records, including copies of RCRA Part B Permit #147, and the Request for Class 3 Permit Modification, are available throughout the 60-day comment period at the Wood River Public Library, 326 E. Ferguson Avenue.

Agency Contact

The permittee's compliance history during the life of the permit being modified is available from the Agency contact person. The Agency contact person is Ms. Mara McGinnis, Public Involvement Coordinator, who can be reached at the following address and phone:

Illinois EPA
Office of Community Relations
1021 N. Grand Avenue East
P.O. Box 19276
Springfield, IL 62794-9276
217/524-3288

The BP site contact is Mr. Gregory Jevyak, who can be reached at the following address and phone:

BP 301 Evans Avenue Post Office Box 167 Wood River, Illinois 62095 618/254-9074



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276

RENEE CIPRIANO, DIRECTOR

RCRA Log NO.B-147-M-2

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

HAZARDOUS WASTE MANAGEMENT RCRA PART B PERMIT

IEPA #1191150001 -- Madison County USEPA ILD #980700967 Amoco Oil Company Main Plant Permit #147 RCRA -- Part B - Administrative Record Issue Date: September 30, 1993 Effective Date: November 4, 1993 Expiration Date: November 4, 2003 Modification Date: October 9, 2001

Gregory S. Jevyak, Site Manager
Global Environmental Management Business Unit
301 Evans Avenue
Post Office Box 167
Wood River, Illinois 62095

A Part B permit is hereby granted pursuant to the Resource Conservation and Recovery Act, Illinois Environmental Protection Act, and Title 35 Illinois Administrative Code (I.A.C.) parts 702, 703, 705, and 720 through 729 to Amoco Oil Company to provide post-closure care for two hazardous waste surface impoundments. Amoco Oil Company is located at 301 Evans Avenue.

This permit consists of the conditions contained herein (including those in any attachments and appendices) and applicable regulations contained in the Illinois Environmental Protection Act and Title 35 I. A. C. Parts 702, 703, 705 and 720 through 729 in effect on the effective date of this permit. The Environmental Protection Act (Ill. Rev. Stat., Chapter 111 1/2, Section 1039) grants the Illinois Environmental Protection Agency the authority to impose conditions on permits which are issued.

If you have any questions regarding this final permit, please contact Mark L. Crites at 217/524-3269.

Joyce L. Munie, P.E.

Manager, Permit Section

Bureau of Land

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Global Environmental Management



BP Amoco Corporation P.O. Box 167 Wood River, IL 62095-0167

December 12, 2001

Ms. Harriet Croke, DW-8J U.S. EPA – Region V RCRA Permitting Branch/IL Section 77 West Jackson Boulevard Chicago, IL 60604

Subject:

BP Products North America

Former Wood River Refinery – Main Plant Class 1* Permit Modification Approval RCRA Part B Permit #147 (Issued 9/30/93)

Dear Ms. Croke:

The attached letter is the approval of the Illinois Environmental Protection Agency (Illinois EPA) for a Class 1* Permit Modification Request submitted in May 2001 for the above-referenced facility.

Per 35 Illinois Administrative Code (IAC) Part 705.163(a)(4) and (5), this notice of the Permit Modification approval is being sent to all persons on the facility mailing list maintained by the Illinois EPA and to the appropriate units of State and local government. This is done in order to specify the changes being made to permit conditions and explain why they are being made.

Installation of three new gradient control wells is being completed in the north-central area of the Main Plant. The wells will be used to remove petroleum hydrocarbons from the subsurface, augmenting hydrocarbon recovery efforts underway using seventeen hydrocarbon recovery wells.

Please contact the Agency representative referenced in the attached letter or me at 618/254-9074 with any comments you may have on the Illinois EPA-approved Permit Modification.

Sincerely,

Gregory S. Jevyak

Environmental Business Manager

Enclosure



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276

RENEE CIPRIANO, DIRECTOR

217/524-3300

October 9, 2001

CERTIFIED MAIL 7099 3400 0001 1278 9824

BP Amoco Corporation
Attn: Gregory S. Jevyak, Site Manager
Global Environmental Management Business Unit
301 Evans Avenue
Post Office Box 167
Wood River, Illinois 62095

Re: 1191150001 -- Madison County Amoco Oil Company - Main Plant ILD980700967 RCRA Log B-147-M-3

RCRA Permit

Dear Mr. Jevyak:

This is in response to a submittal prepared by Keith Wilcoxin of URS Dated May 4, 2001. In this submittal, BP Amoco requests a Class 1* modification to the RCRA Part B Post Closure Permit for the above—referenced facility. Specifically, this document requests approval to install three new groundwater recovery wells, identified by BP Amoco as RC-17, RC-18, and RC-19. Illinois EPA hereby approves the request, and has made the following determinations regarding the new recovery wells:

- 1. At this time, the Illinois EPA concurs on the location and construction methods utilized in the installation of the hydraulic gradient control wells (RC-17, RC-18, and RC-19) in the uppermost aquifer to enhance recovery of hydrocarbons on the water table.
- 2. It is the Illinois EPA's determination that NO analytical data or groundwater level measurements are to be recorded or used for reporting purposes based on the screen length(s) used in the installation of hydraulic gradient control wells RC-17, RC-18, and RC-19.

Since no changes to the permit itself are necessary to implement this approval, only an updated copy of the permit cover page is included. This letter, and the revised permit cover page supercede the previous permit letter, and cover page.

GEORGE H. RYAN, GOVERNOR

If you have any questions regarding this matter, please contact Mark L. Crites at 217/524-3269, or Ryan Bennett at 217/558-2150.

Sincerely,

Joyce L. Munie, P.E. Manager, Permit Section

Bureau of Land

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ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276

THOMAS V. SKINNER, DIRECTOR

217/524-3300

December 18, 2000

CERTIFIED MAIL 7099 3400 0002 1429 4691

BP Amoco Corporation Attn: Gregory S. Jevyak, Site Manager Global Environmental Management Business Unit 301 Evans Avenue P.O. Box 167 Wood River, Illinois 62095

Re:

1191150001 - Madison County

BP Amoco – Wood River Refinery

ILD980700967

Received: September 20, 2000

RCRA Part B Permit Log B-147-M-2

Dear Mr. Edwards:

This is to inform you that, pursuant to 35 Ill. Adm. Code 703.282(f)(1)(e), the Agency will require an additional 30 days to respond to the Class 2 permit modification request submitted by Keith Wilcoxin, P.G. of URS Corporation, and dated September 19, 2000. Therefore, the Agency will respond to the referenced submittal, in accordance with 35 Ill. Adm. Code 703.282(f)(2), on or before January 19, 2001. This date may be subject to change in accordance with 35 Ill. Adm. Code 703.282(f)(7) if this is deemed necessary by Illinois EPA and written consent is obtained from the permittee.

If you have any questions regarding this matter, please contact Mark L. Crites at 217/524-3209.

Sincerely,

Joyce L. Munie, P.E.

Manager, Permit Section

Bureau of Land

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cc: USEPA Region V, Harriet Croke

Keith Wilcoxin, P.G.

GEORGE H. RYAN, GOVERNOR





BP Amoco

Post Office Box 167 Wood River IL 62095-0167

October 13, 2000

Harriet Croke, DW-8J U.S. EPA - Region V RCRA Permitting Branch/IL Section 77 West Jackson Boulevard Chicago, IL 60604

Subject:

Former BP Amoco Wood River Refinery - Main Plant

Request for Class 2 Permit Modification of RCRA Part B Permit

RCRA Permit #147 (Issued 9/30/93)

Dear Ms. Croke:

The attached is a Public Notice that appeared in the *Alton Telegraph* on October 11, 2000. It was submitted as part of the requirement for the above-referenced permit modification request in accordance with 35 Illinois Administrative Code Section 703.282.

Upon the conclusion of the 60-day public comment period described, the Illinois Environmental Protection Agency (Agency) will take appropriate action concerning the possible approval of the modification request. Please contact the Agency representative referenced in the Public Notice with any comments you may have on the proposed permit modification.

Sincerely,

Gregory S. Jevyak

Site Manager



Public Notice

BP Amoco has requested a Class 2 Permit Modification of the RCRA Part B Permit for the former BP Amoco Wood River Refinery (Main Plant). The request is for a permit modification to the compliance monitoring network groundwater monitoring wells at the facility. The modifications, proposed to facilitate site redevelopment, consist of the abandonment and relocation of two monitoring wells, and the abandonment of one additional monitoring well. No changes in the frequency of the groundwater sampling and water level monitoring activities are proposed. The RCRA Part B Permit for the site (#147) was issued by the Illinois Environmental Protection Agency (Agency) on September 30, 1993.

60-Day Comment Period

Commencing on the date of this notice, a 60-day comment period is in effect regarding the above-referenced Permit Modification Request, in accordance with 35 IAC 703.282(ϵ). The name and address of the Agency contact to whom comments must be submitted is provided below.

Public Meeting

A public meeting to be staffed by BP Amoco personnel will be held on Friday morning, October 27, 2000 at 9:00 a.m., at the Roundhouse, 633 N. Wood River Avenue, Wood River, Illinois 62095.

Local Repository

Appropriate records, including copies of RCRA Part B Permit #147, and the Request for Class 2 Permit Modification, are available throughout the 60-day comment period at the Wood River Public Library, 326 E. Ferguson Avenue.

Agency Contact

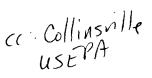
The permittee's compliance history during the life of the permit being modified is available from the Agency contact person. The Agency contact person is Ms. Mara McGinnis, Public Involvement Coordinator, who can be reached at the following address and phone:

Illinois EPA
Office of Community Relations
1021 N. Grand Avenue East
P.O. Box 19276
Springfield, IL 62794-9276
217/524-3288

The BP Amoco site contact is Mr. Gregory Jevyak, who can be reached at the following address and phone:

BP Amoco 301 Evans Avenue Post Office Box 167 Wood River, Illinois 62095 618/254-9074





JKN MAH

Amoco Corporation

Worldwide Engineering and Construction

Post Office Box 65 Wood River, Illinois 62095-0065

July 20, 1995

Certified Mail No. P 558 391 717

Mr. Michael A. Heaton Permit Section Division of Land Pollution Control Illinois Environmental Protection Agency Post Office Box 19276 Springfield, IL 62794-9276

RCRA Part B Permit 1191150001 - Madison County Amoco Oil Company - Main Plant ILD980700967 RCRA Log B-147 Soil Recycling Center
1191150001 - Madison County
Amoco Oil Company - Wood River Refinery
ILD980700967
Permit No. 1993-002-DEX/OPX
Log No. 1993-585 (1993-306)

Dear Mr. Heaton:

This letter is to follow up our telephone conversations from the last week. Amoco is seeking agency clarification concerning the status of our proposed Soil Recycling Center (SRC) for petroleum contaminated soils with regards to our RCRA Part B Permit and the possible creation of new SWMU's.

As discussed, it is my understand that the permitting of the Main Plant facility as a Soil Recycling Center for petroleum contaminated soils as outlined in the forthcoming SRC permit application, will not create any new SWMU's on the property, as long as all clean-up objectives and other requirements outlined in the SRC permit are met.

The SRC permit that is referenced above is the current permit that is in force for our experimental SRC area and expires on July 1, 1996. A new SRC permit application will be submitted in the next few weeks. Our IEPA permit contact is Beverly Albarracin.

Thank-you for your assistance and we await the agency's written concurrence on this matter.

Gregory S. Jevyak

GSJ/kg

D. V. Kalet, Mail Code PO613W

JUL 24 1995

PERMIT SECTION



Certified Mail #P16 2170678 Return Receipt Requested

July 31, 1985

David A. Stringham Acting Chief, Solid Waste Branch U.S. Environmental Protection Agency Region 5 P.O. Box A3587 Chicago, Il 60690

Re: Additional New Requirements
Hazardous and Solid Waste
Amendments of 1984 (HSWA)
Amoco Oil Co. Wood River Refinery
ILD 980700967

Dear Mr. Stringham:

We are in receipt of your May 9, 1985, letter requesting submission of revisions to our Wood River Refinery Resource Conservation and Recovery Act (RCRA) Part B permit application required by the Hazardous and Solid Waste Amendments of 1984 (HSWA). In particular, you requested submission of revisions required by the HSWA by August 8, 1985 (i.e., exposure information). Because the facility is being closed under interm status and in accordance with EPA Region 5's earlier advice, we will not be submitting a RCRA Part B permit application. In addition, a post-closure permit will not be required because no hazardous waste will remain at the site after closure. Therefore, the request contained in your letter is not applicable to our situation. Following is a summary of correspondence on the facility's RCRA permit status.

PLEASE ADDRESS ALL FUTURE CORRESPONDENCE CONCERNING THIS FACILITY TO J. G. HUDDLE, DIRECTOR, ENVIRONMENTAL CONTROL AND PLANNING, MAIL CODE 1203, AT THE ABOVE ADDRESS.

On June 12 and September 5, 1984, we sent you correspondence relative to your January 10, 1984 request for a RCRA Part B permit application, stating that we intended to close the facility. Based on that correspondence, you withdrew your request for a Part B permit application in a letter to us dated January 14, 1985 (attached).

On January 11, 1985, we received approval from the Illinois EPA on a closure plan for the facility which involves the removal and treatment of all hazardous waste and contaminated soil. Certification of closure of one of the areas in the facility, the boiler feedwater solids pit mentioned in your letter of January 14, was made to the Illinois EPA on

Amoco Oil Company

200 East Randolph Drive Post Office Box 6110A Chicago, Illinois 60680



AUG 07 1985

SWB-AIS O.S. EPA, REGION V February 21, 1985. The Illinois EPA approved the closure in a letter dated May 1, 1985 (attached).

Since closure of the entire facility will involve the removal and treatment of all hazardous waste and contaminated soil, no RCRA post-closure permit will be required. Therefore, since no RCRA permits will be required, the requirements of RCRA Section 3019(a) regarding submission of exposure information which you refer to in your May 9 letter are not applicable.

You also refer to the requirements of RCRA Section 3004(u) regarding corrective action for leaks of hazardous waste from solid waste management units. We refer you to our letter of May 17, 1985 (attached), to Mr. Karl J. Klepitsch, Jr., Chief, Solid Waste Branch, of your agency regarding the inapplicability of these requirements to this facility. Our position was reconfirmed in our letter of July 16, 1985 (attached), to Ms. Edith M. Ardiente, Chief, Technical Programs Section, of your agency, regarding the same subject.

If, after your review of this letter, you do not agree with our conclusions on the applicability of the additional new requirements of the HSWA to our facility, we would suggest a meeting with you to resolve our differences.

If you have any questions or would like to meet with us, please call me at 312/856-7826 or G. J. Wurtz at 312/856-5858.

Sincerely,

J. G. Huddle

Director, Environmental Control

and Planning

GJW:gw

Attachments

5HS-13

CERTIFIED MAIL #246 372 005
RETURN RECEIPT REQUESTED

E. J. Sullivan, Consultant Environmental Control Amoco O11 Co. Wood River Refinery Box 182 Wood River, Illinois 62095

> Re: Additional New Requirements Hazardous and Solid Waste Amendments of 1984 (HSWA)

> > Amoco 011 Co. Wood River Refinery ILD 980700967

Dear Mr. Sullivan:

On November 8, 1984, the Hazardous and Solid Waste Amendments of 1984 (HSWA) were signed into law. These Amendments add a number of requirements for your facility which must be addressed before we can issue a permit. A formal request for the submittal of Part B of the Resource Conservation and Recovery Act (RCRA) permit application for treatment, storage, or disposal of hazardous waste had already been made for the above-referenced facility.

The purpose of this letter is to notify you that your RCRA Part B Permit Application must be revised to incorporate the requirements of the Hazardous and Solid Waste Amendments of 1984. The revisions to your Part B application should be submitted no later than August 8, 1985.

This request for a revision to your RCRA Part B permit application and the associated due date of August 8, 1985, for submitting your revisions are related only to the new requirements brought about by the 1984 Amendments. In the meantime, the review and processing of the Part B application you have already submitted will continue and you may be required to make corrections and revisions to your original Part B application that will need to be submitted prior to August 8, 1985.

Enclosed, for your information, is a fact sheet, a brief guidance document, and a copy of selected statute sections on the new requirements. I urge you to examine the enclosures as soon as possible, because target dates under HSWA begin as early as May 8, 1985. For two of the new requirements, exposure assessments and the double liner requirements, additional guidance being developed by EPA Headquarters will be provided to land disposal permit applicants as soon as they become available.

Please contact the previously identified permit writer with our Agency for additional information.

Sincerely yours,

David A. Stringham, Acting Chief

Solid Waste Branch

Enclosures

INITIALS

TYPIST
CHIEF
C

5HW-12

CERTIFIED MAIL #P593667737 RETURN RECEIPT REQUESTED

J. G. Huddle, Director Environmental Control and Planning Amoco Oil Company P.O. Box 6110-A Chicago, Illinois 60680

Re: Amoco Oil Company ILD 980700967

Dear Mr. Huddle:

This letter is in response to your correspondence of June 12, 1984 and September 5, 1984, regarding withdrawal of our request for a Part B permit application and amendment of your Part A permit application, respectively.

Following a review of your treatment process, this Agency agrees to withdraw its January 10, 1984 request for a Part B permit application for the above facility. However, the Agency does not agree that the treatment of the empty calcium oxide bags qualifies for the 40 CFR §261.4(c) exemption as a manufacturing process unit. Accordingly, we have not deleted the hazardous waste process code TO4 from your Part A permit application for this treatment.

Your request to amend the Part A permit application to withdraw the boiler feedwater softener solids pit, which received anhydrous aluminum chloride, is denied. The north pit, which never received this waste, will be deleted from your Part A permit application.

Pursuant to 40 CFR Part 265, Subpart F requirements, by November 19, 1981; owners or operators of a surface impoundment which was used to manage hazard-ous waste were required to implement a groundwater monitoring program capable of determining the facility's impact on the quality of groundwater in the uppermost aquifer underlying the facility. Amoco Oil Company has not performed any groundwater monitoring of the subject boiler feedwater pit. Furthermore, the facility did not prepare a waiver demonstration pursuant to 40 CFR \$265.1(c).

Therefore, unless the facility can demonstrate to Illinois EPA that the existing groundwater monitoring system is capable of determining this regulated unit's impact on the quality of groundwater in the uppermost aquifer beneath the facility, then the facility must install such a system and operate in accordance with the 40 CFR Part 265, Subpart F requirements prior to initiating closure.

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TYPIST AUTHOR STU #2 STU #3 TPS WELD SIRECTOR CHIEF CH

Please contact Mr. David G. Dolan of my staff, at (312) 886-1484, if you have questions regarding these matters.

Sincerely yours,

Edith M. Ardiente, P.E. Chief, Technical Programs Section

cc: Larry Eastep, IEPA Bill Radlinski, IEPA Dale Helmers, IEPA

5HV-12:D.Dolan:cm:12/03/84

P 593 667 737

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED NOT FOR INTERNATIONAL MAIL (See Reverse) J. G. Huddle, Director Environmental Control & Plannin								
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CERTIFIED MAIL # P 557 099 148 RETURN RECEIPT REQUESTED

E. J. Sullivan, Consultant Environmental Control Amoco Oil Co. - Wood River Refinery Box 182 Wood River, Illinois 62095

RE: "Corrective Action Requirements, Hazardous and Solid Waste Amendments of 1984

Amoco Oil Co. - Wood River Refinery ILD 980-700-967

Dear Mr. Sullivan:

As you know, we are currently reviewing Part B of the Resource Conservation and Recovery Act (RCRA) permit application for the above-referenced facility.

On November 8, 1984, the Hazardous and Solid Waste Amendments of 1984 (the Amendments) were enacted to modify RCRA. Under Section 206 (copy enclosed) of the Amendments, all RCRA permits issued after the date of enactment must provide for corrective action for all releases of hazardous waste or constituents from any solid waste management unit, regardless of the time at which waste was placed in the unit. Please note that both hazardous and non-hazardous waste can meet the definition of solid waste under 40 CFR 261.2.

Consequently, we must determine whether such releases have ever occurred at the facility site. If they have, we must ensure that corrective actions either have been taken or will be taken, pursuant to a RCRA permit. An important part of our determination includes your willingess (or unwillingness) to sign the enclosed certification statement. Please read it carefully and either sign it and return it, or return it to us unsigned with a cover letter of explanation, within three weeks of the date of this letter. Any information regarding releases of hazardous waste or hazardous constituents to the environment will be evaluated during the permit review process. Any tentative decision we make concerning your permit application will be public noticed in a newspaper of general circulation in the area of the facility.

Please contact the previously identified permit writer with our Agency for additional information.

Sincerely yours.

Karl J. Klepitsch, Jr. Chief, Solid Waste Branch

Enclosures

INITIALS

TYPIST

AUTHOR 15th 1012

CHIEF

STU #2 STU #3 CHIEF

CHIEF

TPS CHIEF

WMB. CHIEF

CMW DIRECTOR

Hazardous Waste RCRA Part B Permit BP Products North America Inc. -- Main Plant Facility Wood River, Illinois

LPC No. 1191150001

ILD980700967

RCRA Part B Permit Log No. 147

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IEPA - BOL PERMIT SECTION

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ITEM
Groundwater Corrective Action Monitoring Program Attachments Attachment A and Figure

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SECTION I STANDARD CONDITIONS

GENERAL REQUIREMENTS

- 1. EFFECT OF PERMIT. The existence of a RCRA permit shall not constitute a defense to a violation of the Environmental Protection Act or Subtitle G, except for development, modification or operation without a permit. Issuance of this permit does not convey property rights or any exclusive privilege. Issuance of this permit does not authorize any injury to persons or property or invasion of other private rights, or infringement of state or local law or regulations. (35 Ill. Adm. Code 702.181)
- 2. PERMIT ACTIONS. This permit may be modified, reissued or revoked for cause as specified in 35 Ill. Adm. Code 703.270 through 703.273 and Section 702.186. The filing of a request by the Permittee for a permit modification or revocation, or a notification of planned changes or anticipated noncompliance on the part of the Permittee does not stay the applicability or enforceability of any permit condition. (35 Ill. Adm. Code 702.146) However, any requirements imposed under Corrective Action in Section IV of the Part B Permit, which are subject to administrative or judicial challenge shall be stayed until the appeals process is exhausted.
- 3. SEVERABILITY. The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby. (35 Ill. Adm. Code 700.107)
- 4. PERMIT CONDITION CONFLICT. In case of conflict between a special permit condition and a standard condition, the special condition will prevail. (35 Ill. Adm. Code 702.160)
- 5. DUTY TO COMPLY. The Permittee shall comply with all conditions of this permit except for the extent and for the duration such noncompliance is authorized by an emergency permit. Any permit noncompliance constitutes a violation of the Environmental Protection Act and is grounds for enforcement action; permit revocation or modification; or for denial of a permit renewal application. (35 Ill. Adm. Code 702.141 and 703.242)
- 6. DUTY TO REAPPLY. If the Permittee wishes to continue an activity allowed by this permit after the expiration date of this permit, the Permittee must apply for a new permit at least 180 days before this permit expires, unless permission for a later date has been granted by the Agency. (35 Ill. Adm. Code 702.142 and 703.125)
- 7. PERMIT EXPIRATION. This permit and all conditions herein will remain in effect beyond the permit's expiration date if the Permittee has submitted a timely, complete application

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(see 35 Ill. Adm. Code 703.181-703.209) and through no fault of the Permittee the Agency has not issued a new permit as set forth in 35 Ill. Adm. Code 702.125.

- 8. NEED TO HALT OR REDUCE ACTIVITY NOT A DEFENSE. It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. (35 Ill. Adm. Code 702.143)
- 9. DUTY TO MITIGATE. In the event of noncompliance with the permit, the Permittee shall take all reasonable steps to minimize releases to the environment, and shall carry out such measures as are reasonable to prevent significant adverse impacts on human health or the environment. (35 Ill. Adm. Code 702.144)
- 10. PROPER OPERATION AND MAINTENANCE. The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory, and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit. (35 Ill. Adm. Code 702.145)
- 11. DUTY TO PROVIDE INFORMATION. The Permittee shall furnish to the Agency, within a reasonable time, any relevant information which, the Agency may request to determine whether cause exists for modifying, revoking and reissuing or terminating this permit, or to determine compliance with this permit. The Permittee shall also furnish to the Agency, upon request, copies of records required to be kept by this permit. (35 Ill. Adm. Code 702.148)
- 12. INSPECTION AND ENTRY. The Permittee shall allow an authorized representative of the Agency, upon the presentation of credentials and other documents as may be required by law, to:
 - a. Enter at reasonable times upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
 - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

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- c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- d. Sample or monitor, at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the appropriate Act, any substances or parameters at any location. (35 Ill. Adm. Code 702.149)

13. MONITORING AND RECORDS. (35 Ill. Adm. Code 702.150)

- a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. The method used to obtain a representative sample of the waste must be the appropriate method from Appendix A of 35 Ill. Adm. Code 721. Laboratory methods must be those specified in Test Methods for Evaluating Solid Waste: Physical/Chemical Methods, SW-846, latest versions; Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, latest versions; laboratory methods approved in writing by IEPA; or an equivalent method as specified in the facility's Waste Analysis Plan.
- b. The Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports and records required by this permit, and records of all data used to complete the application for this permit for a period of at least 3 years from the date of the sample, measurement, report or application. These periods may be extended by request of the Agency at any time. The Permittee shall maintain records from all groundwater monitoring wells and associated groundwater surface elevations, for the active life of the facility.
- c. Records of monitoring information shall include:
 - i. The date(s), exact place, and time of sampling or measurements;
 - ii. The individual(s) who performed the sampling or measurements;
 - iii. The date(s) analyses were performed;
 - iv. The individual(s) who performed the analyses;
 - v. The analytical technique(s) or method(s) used; and
 - vi. The result(s) of such analyses. (35 Ill. Adm. Code 702.150)

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- 14. REPORTING PLANNED CHANGES. The Permittee shall give notice to the Agency as soon as possible of any planned physical alterations or additions to the permitted facility. For a new HWM facility, the Permittee may not commence treatment, storage or disposal of hazardous waste; and for a facility being modified the Permittee may not treat, store or dispose of hazardous waste in the modified portion of the facility, until:
 - a. The Permittee has submitted to the Agency by certified mail or hand delivery a letter signed by the Permittee and a registered professional engineer stating that the facility has been constructed or modified in compliance with the permit; and

b.

- 1. The Agency has inspected the modified or newly constructed facility and finds it is in compliance with the condition of the permit; or
- 2. If, within 15 days of the date of submission of the letter in paragraph (a), the Permittee has not received notice from the Agency of its intent to inspect, prior inspection is waived and the Permittee may commence treatment, storage or disposal of hazardous waste. (35 Ill. Adm. Code 703.244 and 702.152(a))
- 15. ANTICIPATED NONCOMPLIANCE. The Permittee shall give advance notice to the Agency of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements. For a new facility, the Permittee shall not treat, store or dispose of hazardous waste; and for a facility being modified, the Permittee shall not treat, store or dispose of hazardous waste in the modified portion of the facility, except as provided in Section 703.280, until:
 - i. The Permittee has submitted to the Agency by certified mail or hand delivery a letter signed by the Permittee and a registered professional engineer stating that the facility has been constructed or modified in compliance with the permit; and

ii. Either:

- a. The Agency has inspected the modified or newly constructed facility and finds it is in compliance with the conditions of the permit; or
- b. Within 15 days after the date submission of the letter in section i above, the Permittee has not received notice from the Agency of its intent to inspect, the Permittee may commence treatment, storage or disposal of hazardous waste.

(35 Ill. Adm. Code 702.152(b) and 703.247)

- 16. TRANSFER OF PERMITS. This permit is not transferable to any person except after notice to the Agency. The Agency may require modification of the permit to change the name of the Permittee and incorporate such other requirements as may be necessary under the appropriate Act. (See Sections 703.260 and 703.270, in some cases modification is mandatory.) (35 Ill. Adm. Code 702.152(c))
- 17. MONITORING REPORTS. Monitoring results shall be reported at the intervals specified in the permit. (35 Ill. Adm. Code 702.152(d))
- 18. COMPLIANCE SCHEDULES. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than specified in 35 Ill. Adm. Code 702.162. (35 Ill. Adm. Code 702.152(e))

19. TWENTY-FOUR HOUR REPORTING.

- a. The Permittee shall report to the Agency any noncompliance with the permit which may endanger health or the environment. Any such information shall be reported orally within 24 hours from the time the Permittee becomes aware of the following circumstances. This report shall include the following:
 - i. Information concerning the release of any hazardous waste that may cause an endangerment to public drinking water supplies.
 - ii. Information concerning the release or discharge of any hazardous waste or of a fire or explosion at the HWM facility, which could threaten the environment or human health outside the facility.
- b. The description of the occurrence and its cause shall include:
 - i. Name, address, and telephone number of the owner or operator;
 - ii. Name, address, and telephone number of the facility;
 - iii. Date, time, and type of incident;
 - iv. Name and quantity of material(s) involved;
 - The extent of injuries, if any;

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- vi. An assessment of actual or potential hazards to the environment and human health outside the facility, where applicable; and
- vii. Estimated quantity and disposition of recovered material that resulted from the incident.
- c. A written submission shall also be provided within 5 days of the time the Permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance including exact dates and times and if the noncompliance has not been corrected; the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The Agency may waive the five day written notice requirement in favor of a written report within fifteen days. (35 Ill. Adm. Code 702.152(f) and 703.245(b))
- 20. OTHER NONCOMPLIANCE. The Permittee shall report all instances of noncompliance not otherwise required to be reported under Standard Conditions 17, 18, and 19, at the time monitoring reports, as required by this permit, are submitted. The reports shall contain the information listed in Standard Condition 19. (35 Ill. Adm. Code 702.152(g))
- 21. OTHER INFORMATION. Where the Permittee becomes aware that it failed to submit any relevant facts in the permit application, or submitted incorrect information in a permit application or in any report to the Agency, the Permittee shall promptly submit such facts or information. (35 Ill. Adm. Code 702.152(h))
- 22. REPORTING REQUIREMENTS. The following reports required by 35 Ill. Adm. Code 724 shall be submitted in addition to those required by 35 Ill. Adm. Code 702.152 (reporting requirements):
 - a. Manifest discrepancy report: If a significant discrepancy in a manifest is discovered, the Permittee must attempt to reconcile the discrepancy with the waste generator or transporter. If the discrepancy is not resolved within 15 days after receiving the waste, the Permittee must immediately submit to the Agency a letter describing the discrepancy and attempts to reconcile it and a copy of the manifest or shipping paper at issue. (35 Ill. Adm. Code 724.172(b))
 - b. Unmanifested waste report: The Permittee must submit to the Agency within 15 days of receipt of unmanifested waste an unmanifested waste report on EPA form 8700-13B. (35 Ill. Adm. Code 724.176)

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- c. Annual report: an annual report must be submitted covering facility activities during the previous calendar year. (35 Ill. Adm. Code 724.175)
- 23. SUBMITTAL OF REPORTS OR OTHER INFORMATION. All written reports or other written information required to be submitted by the terms of this permit shall be sent to:

Illinois Environmental Protection Agency Bureau of Land -- #33 Permit Section 1021 North Grand Avenue East Post Office Box 19276 Springfield, Illinois 62794-9276

- 24. SIGNATORY REQUIREMENT. All permit applications, reports or information submitted to the Agency shall be signed and certified as required by 35 Ill. Adm. Code 702.126. (35 Ill. Adm. Code 702.151)
- 25. CONFIDENTIAL INFORMATION. Any claim of confidentiality must be asserted in accordance with 35 Ill. Adm. Code 702.103 and 35 Ill. Adm. Code 161.
- 26. DOCUMENTS TO BE MAINTAINED AT FACILITY SITE. The Permittee shall maintain at the facility, until closure is complete, the following documents and amendments, revisions and modifications to these documents:
 - a. Operating record as required by 35 Ill. Adm. Code 724.173(b)(6) and this permit.

MANIFEST SYSTEM RECORD KEEPING AND REPORTING

- 27. MANIFEST SYSTEM. The Permittee shall comply with the manifest requirements of 35 Ill. Adm. Code 724.171, 724.172 and 724.176.
- 28. OPERATING RECORD. The Permittee shall maintain a written operating record at the facility in accordance with 35 Ill. Adm. Code 724.173.
- 29. ANNUAL REPORT. The Permittee shall prepare and submit an annual report to the Agency prior to March 1st of each year in accordance with the requirements of 35 Ill. Adm. Code 724.175.

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SECTION II: CORRECTIVE ACTION

The Agency may modify this Section when it determines good cause exists for modification of a compliance schedule, such as an act of God, strike, flood or materials shortage or other Force Majeure events over which the Permittee has no control and for which there is no reasonably available remedy.

Given advance written justification from the Permittee, the Agency may, at its discretion, modify the schedules referenced in this Section. The Agency may, at its discretion, provide the Permittee with a preliminary copy of major decisions to be issued pursuant to this section for review and comment prior to final issuance of such decisions.

A. <u>INVESTIGATIONS AND CORRECTIVE ACTION</u>

- 1. In accordance with Section 3004 of RCRA and 35 IAC 724.201, the Permittee shall institute such corrective action as necessary to protect human health and the environment from all releases of hazardous wastes or hazardous constituents, listed in Appendix H of 35 IAC Part 721, from any solid waste management unit (SWMU) at the facility in Wood River, Illinois. The Product Release Sites (PRSs) will also be subject to necessary corrective action.
- 2. The Permittee has divided the facility into 19 land reuse parcels for potential redevelopment as described in the *RFI Phase II/III Project Plan for the Main Plant* (Project Plan, URS, 2001). The Illinois EPA approved the Main Plant Project Plan on June 21, 2002. A map of the Main Plant land reuse parcels is presented in Attachment A. Parcels will be investigated, reported on, remediated, and redeveloped as market conditions allow.
- 3. Twenty-one SWMUs and nine Product Release Sites (PRSs) were listed in the 1993 Permit. The Main Plant Phase I RCRA Facility Investigation (RFI) was completed in 1995 and 1996 and Agency approval of the Phase I RFI report was issued in June 2001.
- 4. The Permittee plans to complete corrective action for the facility SWMUs and PRSs through the parcel land reuse investigations. The goal in following this process is to obtain a no further action (NFA) determination for the entire parcel. If the Permittee determines that redevelopment is not likely to occur in a given parcel, the Permittee will follow the corrective action process for the SWMUs and PRSs within the parcel. If the potential for redevelopment of the parcel becomes viable in the future, the Permittee

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would pursue an NFA determination for the entire parcel at that time. The following land reuse process would be implemented:

- a) Current conditions will be established for the parcel
- b) A Work Plan incorporating the Current Conditions will be developed to investigate data gaps required to properly characterize the area
- c) The investigation, focused on obtaining soil data, will be completed
- d) Data will be analyzed, and a risk assessment will be completed
- e) Identification of the required remedial activities and institutional controls will be made and incorporated into the final Investigation Report
- f) Upon Illinois EPA review and approval of the Investigation Report, a conditional No Further Action letter for soils will be issued for the parcel
- g) An Environmental Land Use Control (ELUC) will be submitted for approval by Illinois EPA
- h) Institutional Controls will be recorded on the property deed following approval of the ELUC
- i) Development of the parcel will proceed
- j) Additional reporting and engineered barrier construction/documentation will be submitted (if necessary)
- 5. The investigation efforts conducted at each area must be sufficient to characterize contamination associated with the all identified recognized environmental conditions present in the area. The parcel investigations will focus on soil and perched water.
- 6. If the investigation results at a SWMU, PRS, or land reuse parcel identify the need for corrective action, the proposed remediation measures will be provided in the Investigation Report, and will be subject to Agency Approval. Remediation may be conducted prior to Agency approval, but is subject to Agency approval.
- 7. The uppermost aquifer at the facility will be addressed under groundwater corrective action in Section III of the permit, not as part of the land reuse investigations.

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- 8. The Permittee may implement Remedial Measures at any time to remove surficial sources of contamination from any unit included in this section. Remedial measures include removal of any obvious contamination, or other immediate measures to alleviate obvious contamination prior to investigative sampling at a unit. All such remedial measures and treatment/disposal of resultant waste must be conducted in accordance with all applicable federal, state and local laws, regulations and ordinances.
- 9. The Permittee will submit Progress Reports for Investigations, including a schedule of parcel priorities, on a quarterly basis in accordance with the June 21, 2002 Agency approval for the Project Plan. The schedule will be subject to modifications by the Agency.
- 10. The status of investigations and corrective action for each SWMU, PRS, and land reuse parcel, as of January 2006 is presented on the tables below (please note this is not a complete listing of SWMUs at the subject facility):

LPC No. 1191150001 ILD980700967 RCRA Log No. 147 Page II-4 of II-11

SWMU Status	of Corrective Action ar	d Land Reuse Activities				
Land Reuse Area	SWMU	Description	Media of Concern	Status of Corrective Action		
		Three Looded Tout Dettors	G-:I	Phase I RFI completed. Additional soil		
8	SMWU 8 (Note 1)	Three Leaded Tank Bottom Disposal Areas	Soil, Groundwater	and groundwater* investigation required. Area 8 Work Plan approved.		
2	SMWU 9	Northeast Sand Pit	Soil, Groundwater	NFA for soils for Area 2. Additional groundwater* investigation required.		
13	SWMU 12 (Note 2)	Southeast Disposal Area	Soil, Groundwater	Phase I RFI completed. Additional soil and groundwater* investigation required.		
4	SWMU 13	API Separator Sludge Landfarm	Soil, Groundwater	NFA for soils and perched water for Area 4. Additional groundwater* investigation required for SWMU 13.		
18	SWMU 14 (Note 3)	North Cell of Spray Pond 1 (NC-SP1) - closed hazardous waste unit	Soil	Undergoing Post-Closure Care. Class 3 Permit Modification for closure by removal submitted November 8, 2002.		
11, 19	SWMU 15 (Note 4)	Spray Ponds Other than NC-SP1	Soil, Groundwater	No further action for Spray Ponds 1, 2, and the Intake Channel based on Phase I RFI. Additional groundwater* investigation required for Spray Pond 3.		
16A	SWMU 16 (Note 6)	Old API Separator	Soil, Groundwater	Phase I RFI completed. Additional soil and groundwater* investigation required.		
6	SWMU 17	Additives Waste Pit	Soil	Phase I RFI completed. No further action is required.		
6	SWMU 18	DAP Spent Filter Cake Storage Area	Soil	Phase I RFI completed. No further action is required.		

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Land Reuse Area	SWMU	Description	Media of Concern	Status of Corrective Action
4	SWMU 21	Former APAC Waste Transfer Area	Soil, Groundwater	NFA for soils for SWMU 21 and Area 4 Additional groundwater* investigation required for SWMU.
6	SWMU 22	New APAC Waste Transfer Area	Soil, Groundwater	Phase I RFI completed. Additional soil and groundwater* investigation required Area 6 Work Plan approved.
6	SWMU 23	Map Spent Filter Cake Storage Area	Soil	Soil remediation required. Area 6 Work Plan approved.
3	SWMU 24 (Note 5)	APAC Slop Oil Tank 70	Soil, Groundwater	Phase I RFI completed. Additional soil and groundwater* investigation required Area 3 Work Plan approved.
8	SWMU 25 (Note 5)	APAC Slop Oil Tank 176	Soil, Groundwater	Phase I RFI completed. Additional soil and groundwater* investigation required Area 8 Work Plan approved.
3	SWMU 26	APAC Slop Oil Tank 189, 190, 845, 846	Soil, Groundwater	NFA for soils. Additional groundwater investigation required. Area 3 Work Pla approved.
5	SWMU 27	APAC Slop Oil Tank 277 Area	Soil	Additional soil investigation required. Area 5 Work Plan approved.
9	SWMU 30 (Notes 2 and 5)	Korea Tank Farm Disposal Areas	Soil, Groundwater	To be addressed as part of PRS 8 investigation (see Table E-4). Area 9 Work Plan approved.
6	SWMU 31	Waste Phenol Accumulation Area	Soil, Groundwater	Phase I RFI completed. Additional soil and groundwater* investigation required Area 6 Work Plan approved.

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SWMU Status of Corrective Action and Land Reuse Activities										
Land Reuse Area	SWMU	Description	Media of Concern	Status of Corrective Action						
				Undergoing Post-Closure Care. Closure						
		ł		by Removal Certification submitted April						
18	SWMU 33 (Note 3)	South Flare Pit	Soil	2005.						
		BP's Sewer System (oil water	Soil,	Phase I RFI completed. Additional soil						
16B	SWMU 34 (Note 7)	separator)	Groundwater	and groundwater* investigation required.						
6	SWMU 36	Liquid Waste Collection Bin	Soil	No further action is required.						

Notes:

For most SWMUs, the status of Corrective action is based on determinations made by Illinois EPA in approval for the Main Plant Phase I RFI Reports, June 2001. The status for the other SWMUs is based on Illinois EPA approval of Land Reuse Investigation Reports, and approval of Current Conditions Reports/Characterization Work Plans for land reuse parcels.

- * The uppermost aquifer at the facility will be addressed under groundwater corrective action in Section III of the permit, not as part of the land reuse investigations.
- (1) Field screening techniques may be used to attempt to locate the disposal areas to determine the presence of lead, crude oil, etc. to determine if any further investigation is warranted. However, field screening must be supplemented with detailed laboratory analysis if the goal of any soil sampling/analysis effort is to show that no further corrective actions at these units are necessary.
- (2) It should be noted that screening methods must be supplemented with actual laboratory analysis to (1) verify the results of the field screening tests and (2) establish the horizontal and vertical extent of contaminated soil at this SWMU.
- (3) No corrective action is necessary at this unit unless warranted under the groundwater monitoring program required by this permit or if undertaken by the Permittee.
- (4) A Land Reuse investigation has been completed at Spray Pond 3 and exceedances of remediation objectives have been identified. Land Reuse Report to be submitted.

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- (5) Field screening must be supplemented with detailed laboratory analysis if the goal of any soil sampling/analysis effort is to show that no further corrective actions at these units are necessary.
- (6) Borings should be conducted in the vicinity of this SWMU to determine the nature of the soil present beneath the concrete. In the event that the Permittee and the Agency agree that the soil present beneath the concrete is not a threat to human health or the environment then the integrity of the concrete should be evaluated, and, if necessary, remedial actions should be conducted to restore its integrity or other containment measures should be taken.
- (7) This SWMU consists of the "current" API Separator and its immediate connections.

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Land Reuse Area	PRS	Description	Media of Concern	Status of Corrective Action
2	PRS 1	Former Tank 228 Dike Area	Soil	NFA for soils for Area 2.
8	PRS 2	Former Tank 246 Dike Area	Soil	Investigation required for PRS 2. Area 8 Work Plan approved.
5	PRS 3	Waste Oil Leak Area	Soil	Area 5 Work Plan approved. Investigation required for PRS 3.
Parts of 2, 3, 6, 7, 8, and 10	PRS 4	Hydrocarbons on the water table	Groundwater	Continuous hydraulic control and product recovery at the facility in accordance with the Permit.
1, 7, 8, and a part of 2	PRS 5	North Tank Farm	Soil	NFA for soils for Areas 1 and 2. Areas 7 and 8 Work Plans approved. Investigation required for Areas 7 and 8.
Parts of 2 and 10	PRS 6	East Tank Farm	Soil	NFA for soils for Area 2. Area 10 Work Plan approved. Investigation required for Area 10.
12	PRS 7	South Tank Farm	Soil	Area 12 Work Plan to be developed. Investigation required for PRS 7.

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Land Reuse			Media of	Status of Corrective
Area	PRS	Description	Concern	Action
9	PRS 8	Korea Tank Farm	Soil	Area 9 Work Plan approved Investigation required for PRS 8.
NA	PRS 9	Gasoline Piping Manifold	Soil	Investigation required for PRS 9.

Note:

PRS 9 is due to a release from a gasoline piping manifold. The location of PRS 9 is currently unknown.

B. FINANCIAL ASSURANCE FOR CORRECTIVE ACTION

- 1. The Permittee shall prepare a cost estimate for the completion of any corrective measure(s) required under this permit, in order to provide financial assurance for completion of corrective action, as required under 35 IAC 724.201(b). Such a cost estimate will be based upon the cost of contamination investigations and assessments for the SWMU(s), and design, construction, operation, inspection, monitoring, and maintenance of the corrective measure(s) to meet the requirements of 35 IAC 724.201, Attachment C and this permit. The revised cost estimate for corrective action must be submitted to the Agency annually by April 1.
- 2. The Permittee shall demonstrate continuous compliance with 35 IAC 724.201 by providing documentation of financial assurance using a mechanism specified in 35 IAC 724.243, in at least the amount of the cost estimate required under Condition II.C.1 the words "completion of corrective action" shall be substituted for "closure and/or post-closure", as appropriate in the financial instrument specified in 35 IAC 724.251. The documentation shall be submitted to the Agency's DLPC within 60 days after the submittal of the initial or revised cost estimates required under Condition IIC.1. The Agency's DLPC may accept financial assurance for completion of corrective action in combination with another financial mechanism that acceptable under 35 IAC 724.246 at its discretion.

C. FUTURE RELEASES FROM SWMUs

Whenever the Permittee becomes aware that any SWMU, that was not found to be releasing hazardous waste or hazardous constituents during the RFI, or was not addressed under the corrective action requirements of this permit, may have started to release hazardous waste or hazardous constituents, the Permittee shall report this information to the Agency's DLPC in writing within thirty (30) days of discovery. Upon the Agency's written request, the Permittee shall determine the nature and extent of the contamination by following the procedures set forth in Conditions II.B and II.C, beginning on the date of notification, rather than on the effective date of the permit.

D. <u>NOTIFICATION REQUIREMENTS FOR AN ASSESSMENT OF NEWLY-IDENTIFIED SOLID WASTE MANAGEMENT UNIT(S)</u>

1. The Permittee shall notify the Agency's DLPC in writing of any newly-identified SWMU(s) discovered during the course of groundwater monitoring, field investigations, environmental audits, or other means, no later than sixty (60)

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calendar days after discovery. The notification shall provide the following information, if available:

- a. The location of the newly-identified SWMU in relation to other SWMUs on a scaled map or drawing;
- b. The type and past and present function of the unit;
- c. The general dimensions, capacities, and structural description of the unit (available drawings and specifications provided);
- d. The period during which the unit was operated;
- e. The specifics on all materials, including but not limited to, wastes and hazardous constituents, that have been or are being managed at the SWMU, to the extent available; and
- f. The results of any relevant available sampling and analysis which may aid in determining whether releases of hazardous wastes or hazardous constituents have occurred or are occurring from the unit.
- 2. If the submitted information demonstrates a potential for a release of hazardous waste or hazardous waste constituents from the newly identified SWMU; it will be investigated and reported in accordance with Condition II.A.

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SECTION III: GROUNDWATER CORRECTIVE ACTION PROGRAM

A. SUMMARY

Hazardous constituents released from the Permittee's facility have been detected in the groundwater at concentrations above background values. Therefore, a corrective action program must be implemented at the facility. The corrective action program provided herein is considered to be an interim measure. The interim corrective action to manage groundwater is to control groundwater flow, or apply alternative innovative technologies as approved by the Agency. Groundwater is pumped from the uppermost aquifer to provide containment, and is treated at the City of Wood River Waste Water Treatment Plant (WWTP). FPH is also pumped from the uppermost aquifer.

The interim corrective action program required by this permit includes:

- Control of the horizontal and vertical flow of the entire vertical column of
 groundwater in the uppermost aquifer such that groundwater flow is towards the
 interior of the facility. This control of groundwater flow will be accomplished by
 withdrawing sufficient quantities of groundwater from the uppermost aquifer.
 Such flow control is necessary as an interim measure to prevent further
 contaminant migration of on-site releases of product or waste, beyond the
 boundaries of the Permittee's facility. The groundwater flow is also influenced by
 nearby industrial pumping centers.
- 2. Verification that the flow of groundwater is adequately controlled as required by Item 1.
- 3. Monitoring the quality and movement of the groundwater in the uppermost aquifer beneath the facility to determine the effectiveness of the interim corrective action program.
- 4. Removing refinery product from the uppermost aquifer.

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B. IMPLEMENTATION

1. The Permittee shall carry out the interim corrective actions specified in this permit on the groundwater present at the facility. The uppermost aquifer at this facility is a sand and gravel aquifer located approximately 30 feet below the ground surface and extending to a depth of about 101-113 feet below ground surface to the top of the bedrock surface. This aquifer is commonly referred to as the "American Bottoms."

C. WELL LOCATION AND CONSTRUCTION

1. The Permittee shall maintain the following groundwater monitoring wells and cone of depression wells at the locations specified on the map presented in Figure 1 of Attachment A.

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IEPA Well No.	BP Well No.	Top of Casing (ft MSL) (1)	Ground Surface Elevation (ft MSL) ⁽¹⁾	Stick Up Length	Well Depth (ft bgs)	Well Depth Elevation (ft MSL)	Well Screen Interval (ft bgs) ⁽²⁾	Well Screen Interval (ft MSL) ⁽²⁾
		Groun	dwater Quality Sampling	Wells Group A				
G002 (3)	G-01R	430.88	428.64	2.24	40	390.90	20.4-40	410.50-390.90
G013	C-3	429.49	429.99	-0.50	49.5	380.16	14.5-49.5	415.16-380.16
G016	C-6	433.37	430.60	2.77	49.5	379.85	14.5-49.5	413.85-378.85
G045*	G-5	445.02	442.82	2.20	50	392.71	30.0-50.0	412.71-392.71
G046	G-6	443.52	441.42	2.10	50	391.47	30-50	411.47-391.47
G062*	G-22	432.62	432.94	-0.32	45	388.00	25-45	408.00-388.00
G067*	G-27	434.98	435.24	-0.26	49	386.80	29.0-49.0	406.80-386.80
G073*	G-33	430.80	431.07	-0.27	44	386.72	23.5-43.5	406.72-386.72
G36* (*3,4,5)	H-36	446.46	445.01	1.45	59	387.49	NA	NA
G-5B* (3,4)	G-5B	445.25	443.08	2.17	73	367.90	NA	NA
G69R* (3,4)	G-29R	445.39	445.78	-0.39	57.4	387.95	NA	NA
G71L	G-31	447.24	445.89	1.35	59	386.81	38.7-58.7	407.11-387.11
G74L*	G-34	446.67	446.86	-0.19	60	386.58	40.0-60.0	406.58-386.58
G75L*	G-35	446.15	446.53	-0.38	60	385.65	40.0-60.0	405.65-385.65
		Ground	dwater Quality Sampling	Wells Group B				
G004* ⁽³⁾	B-4R	444.05	442.13	1.92	59	382.42	39.0-59.0	402.42-382.42
G055*	G-15	447.39	444.76	2.63	56	388.90	35.0-55.0	409.90-389.90
G063*	G-23	430.17	430.48	-0.31	48	382.50	28-48	402.50-382.50
G065	G-25	444.10	444.47	-0.37	55	389.50	35-55	409.50-389.50
G066*	G-26	442.05	442.40	-0.35	55	387.40	35-55	407.40-387.40
G068*	G-28	441.69	442.22	-0.53	50	390.60	28-50	412.60-390.60
G084*		433.69	434.02	-0.33	45	389.02	25.0-44.8	409.02-389.02

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IEPA Well No.	BP Well No.	Top of Casing (ft MSL) (1)	Ground Surface Elevation (ft MSL) ⁽¹⁾	Stick Up Length	Well Depth (ft bgs)	Well Depth Elevation (ft MSL)	Well Screen Interval (ft bgs) ⁽²⁾	Well Screen Interval (ft MSL) ⁽²⁾
G18 ^(3,4)	H-28	447.72	445.04	2.68	50.4	391.92	NA	NA NA
G30R	H-30R	435.36	432.49	2.87	42.8	388.21	22.4-42.4	408.66-388.66
G31R	H-31R	435.36	432.49	2.87	42.2	389.88	22.0-42.0	410.38-390.38
G32R	H-32R	431.75	429.55	2.20	45	384.55	23.8-43.5	405.75-386.05
G76L*	G-36	445.29	445.65	-0.36	60	385.34	40-60	405.34-385.34
G98L (5)	H-18	432.36	430.66	1.70	52.5	378.16	27.5-47.5	403.16-383.16
H-31B ^(3,4)	H-31B	434.27	432.29	1.98	72.8	357.52	NA	NA
		(Gradient Control Monitori	ng Wells				
G301	RP-1	430.13	427.66	2.47	49	379.05	39-49	389.05-379.05
G302*	RP-2D	435.34	433.09	2.25	49	383.63	39-49	393.63-383.63
G303*	RP-3D	435.64	433.30	2.34	44	388.66	34-44	398.66-388.66
G304 ⁽³⁾	RP-4R	434.55	431.74	2.81	49	382.34	39-49	396.34-386.34
G305	RP-5	432.19	429.94	2.25	49	380.42	39-49	390.42-380.42
G306	RP-6	432.80	430.31	2.49	49	381.10	39-49	391.10-381.10
G307	RP-7D	435.09	432.40	2.69	49	383.42	39-49	393.42-383.42
G005*	B-5D	431.31	429.74	1.57	44	383.85	22-44	405.85-383.85
G006*	B-6	429.08	427.92	1.16	44	384.03	24-44	404.03-384.03
G008*	B-8D	430.04	427.95	2.09	50	378.00	20-50	357.74-377.74
G009	B-9	433.47	431.62	1.85	49	382.59	24-49	407.59-382.59
G10L	H-20	432.51	430.11	2.40	58.5	374.66	33.5-53.5	399.66-379.66
GIIL	H-21	431.93	429.57	2.36	53.3	376.79	28.3-48.3	401.79-381.79
G13L	H-23	433.73	431.82	1.91	51.5	381.85	23-43	410.35-390.35
G14L	H-24	432.12	429.77	2.35	57	372.59	32-52	397.59-377.59

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IEPA Well No.	BP Well No.	Top of Casing (ft MSL) (1)	Ground Surface Elevation (ft MSL) ⁽¹⁾	Stick Up Length	Well Depth (ft bgs)	Well Depth Elevation (ft MSL)	Well Screen Interval (ft bgs) ⁽²⁾	Well Screen Interval (ft MSL) ⁽²⁾	
G16L	H-26A	435.43	433.15	2.28	55	378.31	40-55	393.31-378.31	
G011	C-1	432.84	430.12	2.72	50	379.73	15-50	414.73-379.73	
Gradient Control Monitoring Wells									
G017	C-7	434.33	431.56	2.77	49.5	381.31	14.5-49.5	416.31-381.31	
G020	C-10	432.76	430.74	2.02	49.5	380.49	14.5-49.5	415.49-380.49	
G021*	C-11	433.71	431.79	1.92	49.5	383.00	14-49	417.61-382.61	
G022	C-12	435.39	432.85	2.54	49	383.85	14-49	418.85-383.85	
G023*	C-13	433.83	431.12	2.71	49.5	380.83	14.5-49.5	415.83-380.83	
G037	C-27	427.62	427.95	-0.33	35	392.50	23.9-34	403.60-393.50	
G042	G-2D	436.86	434.71	2.15	44	390.66	23.03-43.03	411.63-391.63	
G050 (5)	G-10	432.67	430.67	2.00	44	386.67	24-44	406.67-386.67	
G059*	G-19	429.03	429.39	-0.36	45	384.30	25-45	404.30-384.30	
G049 (5)	G-9	431.63	429.61	2.02	50	379.61	27-47	402.61-382.6	
G056	G-16	425.24	425.53	-0.29	31	394.70	10-30	415.70-395.70	
G057	G-17	426.68	426.96	-0.28	35	391.90	15-35	411.90-391.90	
G058	G-18	427.09	427.31	-0.22	36	391.20	16-36	411.20-391.20	
G061*	G-21	425.53	426.9	-1.37	40	385.80	20-40	405.80-385.80	
G064	G-24	436.71	436.91	-0.20	55	381.90	29-49	407.90-387.90	
G078*	G-38	425.19	425.51	-0.32	40	385.35	19-39	406.35-386.35	
G079*	G-39	422.84	423.22	-0.38	40	382.97	19-39	403.97-383.97	
G082	G-42	431.13	428.79	2.34	40	388.63	19-39	409.63-389.63	
G083	G-4DR	441.06	437.93	3.13	46	392.06	27.15-46	412.51-392.51	
G116	RL-16	428.09	426.91	1.18	52	374.08	47-52	379.00-374.08	

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IEPA Well No.	BP Well No.	Top of Casing (ft MSL) (1)	Ground Surface Elevation (ft MSL) (1)	Stick Up Length	Well Depth (ft bgs)	Well Depth Elevation (ft MSL)	Well Screen Interval (ft bgs) ⁽²⁾	Well Screen Interval (ft MSL) ⁽²⁾
G19 (3,5)	H-29	429.03	429.39	-0.36	55	374.39	25-55	344.39-374.39
G33 ^(3,4)	H-33	433.21	431.19	2.02	41.4	389.79	NA	NA
G34 ^(3,4)	H-34	433.74	431.48	2.26	35.6	393.62	NA	NA
G35* (3,4)	H-35	434.68	431.68	3.00	45.8	382.86	NA	NA
G36R	C-26	426.55	426.95	-0.40	35	391.55	24.1-34.1	402.85-392.85
G37*	H-37	434.50	432.38	2.12	46	385.95	31-46	400.95-385.95
G39 (3,4)	H-39	429.78	427.51	2.27	42.6	387.21	NA	NA _
G83L	Н-3	430.02	427.59	2.43	52.5	374.53	27.5-47.5	399.53-379.53
G84L	H-4	435.05	433.77	1.28	59	373.96	34-54	398.96-378.96
G85L	H-5	441.47	440.23	1.24	64	375.89	26-59	413.89-380.89
G86L	Н-6	442.90	441.03	1.87	64.3	376.04	39.3-59.3	401.04-381.04
		(Gradient Control Monitori	ng Wells				
G87L	H-7	430.89	429.13	1.76	51.5	376.56	26.5-46.5	401.56-381.56
G89L	H-9	433.13	429.93	3.20	53.5	377.79	28.5-48.5	402.79-382.79
G91* (3,4)	M-1D	429.81	427.65	2.16	40.4	389.42	NA	NA
G93* (3,4)	M-3D	428.95	426.85	2.10	41.16	387.79	NA	NA
G91L	H-11	438.66	436.48	2.18	63.5	375.05	38.5-58.5	400.05-380.05
G92L	H-12	445.23	443.18	2.05	69	376.71	32-64	413.71-381.71
G96L	H-16	433.53	431.42	2.11	58.5	373.86	33.5-53.5	398.86-378.86
G97L	H-17	437.75	435.33	2.42	58	372.75	33-53	397.75-377.75
G99L	H-19	432.34	430.39	1.95	53.5	376.09	28.5-48.5	401.59-381.59
G103	RL-3	427.66	425.15	2.51	39	386.43	29-39	396.43-386.43
G104	RL-4	426.29	424.31	1.98	39	385.54	29-39	398.54-388.54

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IEPA Well No.	BP Well No.	Top of Casing (ft MSL) (1)	Ground Surface Elevation (ft MSL) (1)	Stick Up Length	Well Depth (ft bgs)	Well Depth Elevation (ft MSL)	Well Screen Interval (ft bgs) (2)	Well Screen Interval (ft MSL) ⁽²⁾
G105	RL-5	428.55	425.48	3.07	34	388.28	24-34	395.28-385.28
G106	RL-6	432.78	430.3	2.48	44	386.46	34-44	396.46-386.46
G107	RL-7	429.92	427.41	2.51	39	388.59	29-39	398.59-388.59
G108	RL-8	430.5	427.85	2.65	39	389.35	29-39	399.35-389.35
G109	RL-9	429.56	427.57	1.99	39	388.43	29-39	398.43-388.43
G110	RL-10	427.12	425.12	2.00	34	390.88	24-34	400.88-390.88
R66L	RL-6BR	434.31	432.09	2.22	55.3	377.19	50-55	382.19-377.19
G88L	RL-8B	430.8	427.65	3.15	55	372.54	50-55	377.54-372.54
		Н	ydrocarbon Recovery Syst	em Wells				
G601	RC-1	432.74	430.14	2.60	56	373.40	36-56	393.40-373.40
G602	RC-2	432.80	431.20	1.60	55	374.96	35-55	394.96-374.96
G603	RC-3	431.89	431.38	0.51	51	379.39	31-51	399.39-379.39
G604	RC-4	433.51	431.29	2.22	49.5	382.18	25.9-49.5	402.18-382.18
G605	RC-5	432.36	430.08	2.28	49	381.37	29.1-49.1	401.37-382.18
G606	RC-6	430.48	429.72	0.76	55	373.27	20-50	408.27-378.27
G607	RC-7	429.42	427.58	1.84	58.5	368.97	24-54	403.97-373.97
G608	RC-8	433.24	430.55	2.69	61	364.90	26-56_	399.90-369.90
G609	RC-9	438.50	435.51	2.99	64	367.40	29-59	402.40-372.40
G610	RC-10	445.88	443.06	2.82	69	366.61	33-63	401.61-371.61
G611	RC-11	442.44	440.47	1.97	70	369.96	35-65	404.96-374.96
G612	RC-12	443.69	442.05	1.64	73	368.21	38-68	448.63-373.21
G613	RC-13	433.27	431.46	1.81	60	371.25	25-55	406.25-376.25
G614	RC-14	433.24	431.70	1.54	59.5	371.60	30-60	406.60-376.60

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IEPA Well No.	BP Well No.	Top of Casing (ft MSL) (1)	Ground Surface Elevation (ft MSL) ⁽¹⁾	Stick Up Length	Well Depth (ft bgs)	Well Depth Elevation (ft MSL)	Well Screen Interval (ft bgs) (2)	Well Screen Interval (ft MSL) ⁽²⁾
G615	RC-15	431.63	430.27	1.36	60	372.15	25-55	407.15-377.15
G616	RC-16	434.85	432.42	2.43	65	367.61	30-60	402.61-372.61
G617 ⁽⁵⁾	RC-17	430.22	428.34	1.88	58	370.34	36-53	392.41-375.41
G618 (5)	RC-18	431.76	429.35	2.41	57.5	371.85	17.5-52.5	411.76-376.76
G619 ⁽⁵⁾	RC-19	429.17	427.23	1.94	58	369.23	18-53	408.92-373.92
G629	RCH-29	437.61	437.38	0.23	59.1	379.79	29.1-59.1	410.39-379.79
			Cone of Depression W	ells				
G662	PW-62	432.78	430.72	2.06	104.3	326.90	69.3-104.3	361.90-326.90
G664	PW-64	432.13	430.69	1.44	120.38	310.02	85.38- 120.38	345.02-310.02
G665	PW-65	433.69	432.27	1.42	122.55	309.35	87.55- 122.55	344.35-309.35
G666	PW-66	434.14	432.26	1.88	126.1	305.50	91.1-126.1	340.50-305.50

NA = Not Available.

^{*} The Groundwater Management Zone (GMZ) boundary wells
(1) Top of casing and ground surface elevation measurements are from the 2004 Monitoring Well Survey.

⁽²⁾ The Modifications were made to the well construction information based on review of boring logs and well construction details.

⁽³⁾ No boring log.

⁽⁴⁾ Well depth and well depth elevation calculated using measurements collected during 2nd Quarter 2005, and 2004 surveyed ground surface information, respectively.

⁽⁵⁾ Well depth elevation calculated using 2004 surveyed ground surface information.

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- 2. Construction of each monitor well/piezometer must be in accordance with the diagram contained in Attachment 1 to this Permit or details and diagrams approved by the Agency's DLPC. All new monitor wells/piezometers to be installed must be continuously sampled and logged on Agency boring logs (example in Attachment A) unless otherwise approved by the Agency. Construction details are to be recorded on an Agency acceptable form as provided in Attachment A.
- 3. The Permittee shall notify the Agency within 30 days in writing if any of the wells identified in Condition III.C.1 are damaged or the structural integrity has been compromised. A proposal for the replacement of the subject well shall accompany this notification.
- 4. Should any well become consistently dry or unserviceable, a replacement well shall be provided within ten (10) feet of the existing well. This well shall monitor the same zone as the existing well and be constructed in accordance with the current Illinois EPA groundwater monitor well construction standards at the time that the wells are replaced. A replacement well which is more than ten (10) feet from the existing well or which does not monitor the same geologic zone must be approved by the Agency and designated as a new well.
- 5. The Permittee shall submit boring logs, construction diagrams and data sheets from installation and development of a new or replacement well to the Agency at the address below within thirty (30) days of the date that installation of the well is completed. In addition, the Permittee shall submit certification that plugging and abandonment of a well was carried out in accordance with the approved procedures to the Agency at the address below within thirty (30) days of the date that the well is plugged and abandoned. All pertinent information should be submitted to the appropriate State agencies.

Illinois Environmental Protection Agency Groundwater Assistant Unit Division of Land Pollution Control -- #33 Post Office Box 19276 Springfield, Illinois 62794-9276

6. All wells/piezometers shall be equipped with protective caps and locks.

Monitoring wells or piezometers located in high traffic areas must be protected with bumper guards.

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D. GROUNDWATER PROTECTION STANDARD

1. The Permittee shall sample the Groundwater Quality Sampling Wells listed in Condition III.C.1 for the constituents listed below. The Permittee shall sample the Group A wells listed in Condition III.C.1 during an initial sampling event, and sample the Group B wells listed in Condition III.C.1 not more than three years later. The Permittee shall sample the Group A and Group B wells on an alternating three-year basis.

	Storet
	Number
<u>Parameter</u>	<u>(Total)</u>
Metals	
Arsenic	01002
Barium	01007
Beryllium	01012
Cadmium	01027
Chromium	01034
Lead	01051
Nickel	01067
Selenium	01147
Vanadium	01087
VOCs	
Benzene	34030
Toluene	34010
Ethylbenzene	78113
Xylenes	34020
Methyl Tertiary-Butyl Ether	
(MTBE)	NA
SVOCs	
Benzo(a)anthracene	34526
Benzo(a)pyrene	34247
Benzo(b)fluoranthene	34230
Benzo(k)fluoranthene	24242
Chrysene	34320
Dibenzo(a,h)anthracene	34556
Naphthalene	34696

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E. GROUNDWATER MONITORING PROGRAM

- 1. In accordance with 35 Ill. Adm. Code 620.250, a GMZ is a three dimensional region containing groundwater being managed to mitigate impairment caused by the release of contaminants from the facility. The following thirty-four (34) groundwater monitoring wells shall define the outermost horizontal and vertical extent of the approved GMZ:
 - a. GMZ boundary wells listed by location:
 - Northern Boundary: G084, G073, G063, G062, G067, G068, G69R, G76L, G75L, and G74L;
 - Eastern Boundary: G055, G045, G-5B, G066, G004, G36, G35, G005, G91, G93, G006, and G008;
 - Southern Boundary: G37, SWMU12-MW02, and G302; and
 - Western Boundary: G303, G023, G021, G078, G079, G059, and G061.
 - b. Vertical boundaries of the GMZ shall range from the approximate top of the uppermost aquifer (30 feet bgs) to the top of the bedrock surface at the facility.
- 2. The interim corrective action program shall control the horizontal and vertical flow in the vertical column of water present in the uppermost aquifer beneath the facility and monitor the position and rate of migration of the hydrocarbon pool as follows:
 - a. The Gradient Control Wells (Cone of Depression (COD) wells) listed in Condition III.C.1 and located on are hereby incorporated by permit into the interim corrective action program.
 - b. The pumping rate from each COD well shall be recorded daily. This data shall be used to calculate the monthly average withdrawal rate for the COD System.
- 3. The Permittee shall monitor the groundwater horizontal and vertical gradients in the uppermost aquifer beneath the facility.

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- 4. The Permittee shall record the following measurements and submit to the Agency by March 31st of the year following the annual monitoring period as required by Condition III.G.2.
 - a. A record of the amount of groundwater withdrawn each day by the COD wells.
 - b. Quarterly monitoring of the piezometric head at wells in the uppermost aquifer identified in Condition C.1 above to demonstrate that groundwater flow is properly controlled throughout the contaminated area requiring corrective action in the uppermost aquifer.
 - c. The amount of hydrocarbon recovered from the entire recovery system.
 - d. The measured thickness of hydrocarbon product encountered at each well identified in Condition III.C.1.
- 5. The Permittee shall determine the groundwater flow rate and direction in the uppermost aquifer annually from the monitoring wells listed in Condition III.C.1.
- 6. The Permittee shall submit an application for permit modification if a demonstration cannot be made that the groundwater flow in the uppermost aquifer is being controlled as required by Condition III.E.4.b. This application must contain a revised corrective action program meeting which provides for removal or treatment of contaminated groundwater beneath the facility and be submitted within ninety (90) days of the date that the demonstration required by Condition III.E.4.b was attempted.
- 7. Prior to making any changes on-site which might reduce the overall program associated with controlling the groundwater flow as required by Condition III.E.2 of the permit (i.e., maintain and verify an inward gradient), the Permittee must obtain written permission from the Agency. Detailed information regarding the changes shall be submitted to the Agency at least 120 days prior to the date that the change is to be made. Disapproval or approval with modifications of any written requests for changes shall be subject to the appeal provisions of Section 40 of the Illinois Environmental Protection Act.
- 8. The Permittee shall maintain all equipment associated with withdrawal and treatment of water withdrawn from the uppermost aquifer to adequately control

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groundwater flow. This includes maintenance of any pollution control equipment (i.e., air pollution and water pollution control equipment) necessary for these activities.

- 9. If the groundwater gradient is not maintained, as required by Condition III.E.2 the Permittee shall submit an application for a permit modification.
- 10. The Groundwater Quality Sampling wells listed in Condition III.C.1 shall be monitored for constituents and frequency listed in Condition III.D.1.
- 11. If the Permittee determines that the interim corrective action is not effective in managing the impact to groundwater, the Permittee shall submit an application for a permit modification within ninety (90) days to make any appropriate changes to the program.
- 12. The Permittee shall determine the groundwater surface elevation referenced to mean sea level (MSL) at each well each time groundwater is sampled in accordance with Condition III.D.1.
- 13. The Permittee shall report the surveyed elevation of stick-up and ground surface referenced to MSL when the well is installed (with as-built diagrams) and every two years, or whenever the elevation changes.
- 14. Elevation, as referenced to MSL, of the bottom of each monitoring well (STORET 72020), is to be measured and reported annually. The mandatory measurement shall be taken during the months of April or May and reported by March 31st of the year following the monitoring period.

F. SAMPLING AND ANALYSIS PROCEDURES

The Permittee shall follow the techniques and procedures described in Volume 2, Section 3 of the Approved Permit Application and as modified by this permit when obtaining and analyzing samples from the groundwater monitoring wells described in Condition III.C.1:

- 1. Samples shall be collected by the techniques described in Section 3.5 of Volume 2 of the Approved Permit Application.
- 2. Samples shall be preserved, shipped and handled in accordance with the procedures specified in Section 3.5 and Section 3.9, respectively, of Volume 2 of the Approved Permit Application.

- 3. Samples shall be analyzed according to EPA approved procedures.
- 4. Samples shall be tracked and controlled using the chain of custody procedures specified in Section 3.10.2 of Volume 2, of the Approved Permit Application.

G. REPORTING AND RECORDKEEPING

- 1. The Permittee shall enter all monitoring, testing and analytical data obtained in accordance with Conditions III.D and III.E into the operating record.
- 2. Results of samples collected to meet the requirements of Condition III.D.1 shall be submitted to the Agency on March 31st of the year following the annual monitoring period.
- 3. Groundwater surface elevation data, measured pursuant to Condition III.E.12, shall be collected at least quarterly and submitted to the Agency on March 31st of the year following the annual monitoring period.
- 4. Groundwater withdrawal rates, calculated pursuant to Condition III.E.2.b shall be submitted on March 31st of the year following the annual monitoring period.
- 5. Gradient control measurements collected pursuant to Condition III.E.4 shall be submitted to the Agency on March 31st of the year following the annual monitoring period.
- 6. The groundwater flow rate and direction, determined pursuant to Condition III.E.5, shall be submitted on March 31st of the year following the annual monitoring period.
- 7. All additional data collected for the groundwater monitoring program (as specified in Conditions III.E and III.F) shall be submitted to the Agency in on March 31st of the year following the annual monitoring period.
- 8. The Permittee shall develop a brief report evaluating each set of monitoring results collected in accordance with Conditions III.D, III.E and III.F and place it in the operating record for the facility. This report must evaluate each set of results and determine whether or not the groundwater flow in the uppermost aquifer is being adequately controlled to contain any contaminant plume originating from the

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facility as required by Condition III.E.2. If data indicates that groundwater flow is not being adequately controlled, the Permittee shall:

- a. Notify the Agency in writing within seven (7) days of the date that this determination is made;
- b. Take actions as necessary to regain the control of groundwater flow as required by Condition III.E.2.
- c. Submit a written report to the Agency within thirty (30) days describing the actions taken to regain control of groundwater flow. In addition, the report must contain information which demonstrates that groundwater flow is being adequately controlled.
- d. Submit a request for permit modification to the Agency within sixty (60) days describing any changes, which must be made to the corrective action program to ensure that the groundwater flow is adequately controlled.
- 9. The Permittee shall submit a written report to the Agency annually which discusses the effectiveness of the interim corrective action program. The report must address at a minimum: (1) the ability of the program to control groundwater flow as required by Condition III.E.2, and (2) describe any improvement in the quality of groundwater beneath the facility which has resulted from the interim corrective action program, if samples are collected during the monitoring period. This report must be submitted by March 31st of the year following the annual monitoring period.
- 10. The Permittee shall report all information to the Agency in a form, which can be easily reviewed. All submittals must contain tables of data, drawings and text (as necessary) to accurately describe the information contained in the submittal.

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SECTION IV REPORTING AND NOTIFICATION REQUIREMENTS

The reporting and notification requirements of each section of the RCRA permit are summarized below. This summary is provided to <u>highlight</u> the various reporting and notification requirements of this permit.

Condition	Submittal	<u>Due Date</u>
SECTION I:	STANDARD CONDITIONS	
6	Complete application for new permit.	At least 180 days prior to permit expiration.
11	Information requested by Agency and copies of records required to be kept by this permit.	Reasonable time.
14	Notify Agency of planned physical alterations or additions.	At least 15 days prior to planned change.
15	Notify Agency of changes which may result in permit noncompliance.	
16	Application for permit modification indicating permit is to be transferred.	
18	Submission of any information required in a compliance schedule.	Within 14 days after each schedule date.
19	Report to Agency any non-compliance which may endanger health or environment.	
	Telephone	Within 24 hours after discovery.
	in writing	Within 5 days after discovery.

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20	Report all other instances of noncompliance.	March 1 of each year along with Annual Report.
29	Submit annual report required by 35 IAC 724.175.	March 1 of each year.

ATTACHMENT A

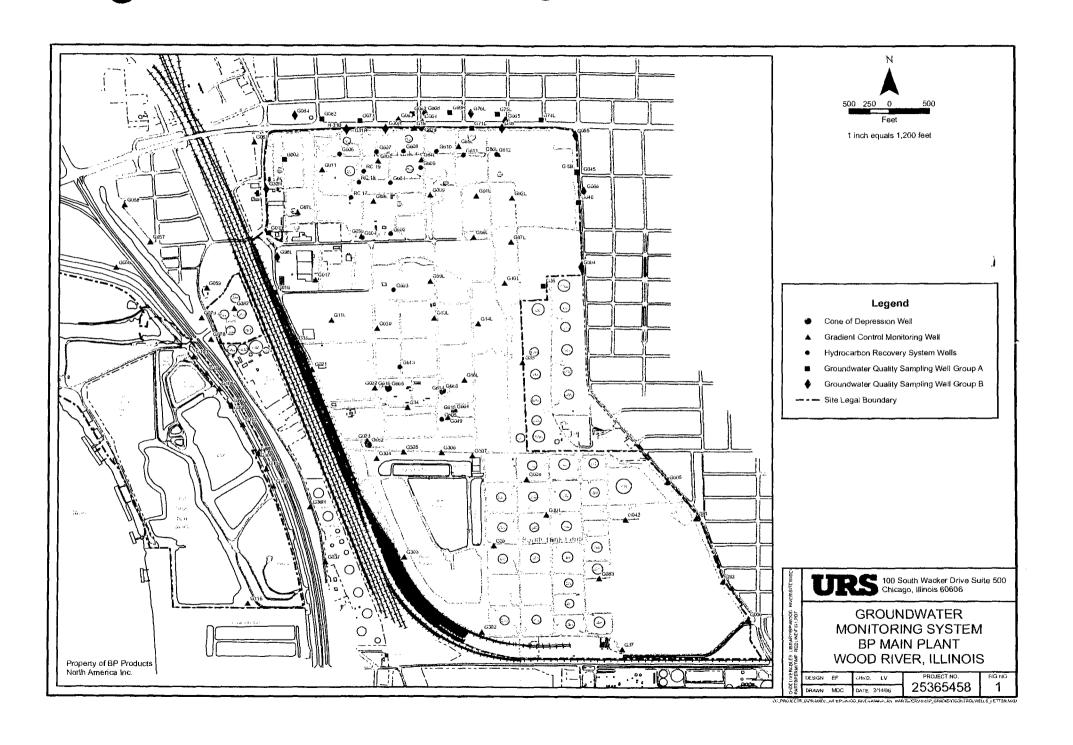
Groundwater Corrective Action Monitoring Program Attachments and Figure

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2006



Hazardous Waste RCRA Part B Permit

BP Products North America Inc. -- Main Plant Facility

Wood River, Illinois

LPC No. 1191150001

ILD980700967

RCRA Part B Permit Log No. 147

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SECTION I: POST CLOSURE

A. SUMMARY

Hazardous waste management units where waste is left in place must receive post closure care for at least 30 years after the date the certification of closure is approved in writing by the Agency's DLPC or the date this post closure permit becomes effective, whichever is later. Activities required during post closure care include, but are not limited to (1) maintenance of final cover, (2) monitoring of the groundwater, and (3) providing financial assurance for post closure activities pursuant to 35 IAC Part 724.

B. UNIT IDENTIFICATION

The Permittee shall provide post-closure care for the following hazardous waste management units, subject to the terms and conditions of this permit:

- 1. The South Flare Pit (SFP) measures approximately 75 feet by 25 feet and consists of a flatbed rail car placed below grade to hold waste material. Wastes managed in the SFP included calcium sulfonate, magnesium sulfonate, zinc phosphate phenates, high sulfur acids, high phosphate acids, SAE 5W oil, and filter cake. It was identified as a hazardous waste management unit (HWMU) because phosphorous pentasulfide (U189) was placed in the unit.
- 2. The North Cell of Spray Pond #1 (NC SP1) covers approximately 3.5 acres on the north edge of the cooling pond complex. The unit is surrounded by a dike made of soil borrowed from the floor of the unit, which is made up of approximately 10 feet of in situ clay. This unit receives an influent mixture of cooling water and sour water from the Fluidized Catalytic Unit. NC SP1 was identified as a HWMU because it received reactive sulfide material (D003).

35 IAC 703.121(b) requires owners and operators of surface impoundment units that received wastes after July 26, 1982 or certified closure in accordance with 35 IAC 725.215 after January 26, 1983, to obtain post closure permits, unless they demonstrate closure by removal as provided under 35 IAC 703.159 and 160. Since both units went through RCRA closure and were certified closed in accordance with 35 IAC 725.215 in 1986, post closure care in accordance with this permit is required.

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Post closure permit conditions deal with monitoring, maintaining, and recordkeeping of the hazardous waste management units in accordance with the provisions of the post-closure care plans. Section I contains conditions specific to post-closure and implements the regulatory requirements of 35 IAC 724, Subpart G.

C. MONITORING, MAINTENANCE, AND RECORDKEEPING

- 1. The Permittee shall conduct post closure care for each hazardous waste management unit listed in Section B above to begin after completion of closure of the unit and continue for thirty (30) years after that date.
- 2. The Agency may include restrictions upon the future use of the site if necessary to protect public health and the environment, including permanent prohibition of the use of the site for purposes which may create an unreasonable risk of injury to human health or the environment. After administrative and judicial challenges to such restrictions have been exhausted, the Agency shall file such restrictions of record in the Office of the Recorder of the county in which the hazardous waste disposal site is located.
- 3. The Permittee shall not allow any use of the units designated in Section B which will disturb the integrity of the final cover, liners any components of the containment system, or function of the facility's monitoring systems during the post closure care period unless such use is necessary to protect public health or the environment.
- 4. The Permittee shall implement the Post Closure Plan contained in the Approved Permit Application. All post closure care activities must be conducted in accordance with the provisions of the Post Closure Plan.
- 5. The Permittee must request a permit modification to authorize a change in the approved Post-Closure Plan. This request must be in accordance with applicable requirements of Parts 702, 703 and 724 and must include a copy of the amended Post-Closure Plan for approval by the Agency.
- 6. The Permittee shall maintain and monitor the groundwater monitoring system and comply with the other applicable regulations of 35 IAC 724 Subpart F (Groundwater Protection) during the post closure period.

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- 7. The Permittee shall maintain the integrity and effectiveness of the final cover, including making repairs to the cap as necessary to correct the effects of settling, subsidence, erosion, and other events.
- 8. The Permittee shall prevent run on and run off from eroding or otherwise damaging the final cover.

D. INSPECTIONS

The Permittee shall inspect the components, structures, and equipment at the site in accordance with the inspection schedule described in Section 5.6 of the Approved Permit Application.

E. NOTICES AND CERTIFICATION

- 1. The person or office specified in the Post Closure Plan must keep the plan during the remainder of the post closure period.
- 2. No later than sixty (60) days after the effective date of this permit the Permittee shall submit to the local zoning authority, or the authority with jurisdiction over local land use, and to the Agency a record of the type, location, and quantity of wastes disposed within each cell or other disposal unit of the facility. For wastes disposed of before January 12, 1981, the Permittee shall identify the type, location, and quantity of the wastes to the best of his knowledge and in accordance with any records he has kept.
- 3. Within sixty (60) days after the effective date of this permit, the Permittee shall:
 - a. Record, in accordance with Illinois law, a notation on the deed to the facility property—or on some other instrument that is normally examined during title search—that will in perpetuity notify any potential purchaser of the property that:
 - (i) The land has been used to manage hazardous wastes:
 - (ii) Its use is restricted under 35 IAC 724.217(c); and
 - (iii) The survey plot and record of the type, location, and quantity of hazardous wastes disposed within each cell or other hazardous waste disposal unit of the facility have been filed with the Agency.

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the County Recorder, and any local zoning authority. This plat must be prepared and certified by an independent professional registered land surveyor.

- b. Submit a certification to the Agency, signed by the Permittee, that he has recorded the notation specified in Condition E.3.a, including a copy of the document in which the notation has been placed.
- 4. If the Permittee or any subsequent owner or operator of the land upon which a hazardous waste disposal unit is located wishes to remove hazardous wastes and hazardous waste residues, the liner, if any, or contaminated soils, then he must request a modification to this post-closure permit in accordance with the applicable requirements in 35 IAC Parts 703, 705 and 724. The owner or operator must at a minimum demonstrate that the removal of hazardous wastes will satisfy the criteria of 35 IAC 724.217(c).
- 5. No later than sixty (60) days after completion of the established post closure care period for each hazardous waste disposal unit, the Permittee shall submit to the Agency, by registered mail, a certification that the post-closure care for the hazardous waste disposal unit was performed in accordance with the specifications in the approved Post Closure Plan. The certification must be signed by the owner or operator and an independent registered professional engineer. Documentation supporting the independent registered professional engineer's certification must be furnished to the Agency upon request until the Agency releases the Permittee from the financial assurance requirements for post-closure care.

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SECTION II: DETECTION MONITORING

A. SUMMARY

The Detection Monitoring program for the South Flare Pit and the North Cell of Spray Pond #1 includes 7 monitoring wells, in the uppermost aquifer. At the time of closure in 1986, the groundwater monitoring system had not detected an impact from the two units.

B. WELL LOCATION AND CONSTRUCTION

The Permittee shall install and maintain a groundwater monitoring system at the point of compliance as specified below:

 The Permittee shall install and maintain groundwater monitoring wells at the locations specified on the map presented in Figure 1 and in conformance with the following list:

		-Well	- Well Depth-	-Well-Screen
IEPA	AMOCO	—Depth—	Elevation-	Interval
Well No.	Well No.	(ft.)	(ft. MSL)	<u> (ft. MSL)</u>
*G301	RP-1	49	379.05	389.05 379.05
*G302	RP 2D	49	383.63	393.63 383.63
*G303	RP 3D	44	388.66	398.66-388.66
-G304	RP-4D	- 49	382.34	-396.34-386.34
- G305	RP_5	49	380.42	390.42 380.42
-G306		49	381.10	391.10 381.10
-G307		49	383.42	393.42-383.42

^{*}denotes upgradient well(s)

2. The Permittee shall construct and maintain the monitoring wells identified in Condition B.1 in accordance with the detailed plans and specifications presented in the Approved Permit Application.

Replacement wells shall be constructed in accordance with Attachment 1.

 All wells deleted from the monitoring program shall be plugged and abandoned in accordance with the Attachment 3. Well plugging and abandonment methods and

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certification shall be submitted to the following address within thirty (30) days after the wells are removed from the monitoring program.

Illinois Environmental Protection Agency Bureau of Land #33 Permit Section 1021 North Grand Avenue East Post Office Box 19276 Springfield, Illinois 62794-9276

C. MONITORING PARAMETERS

1. The Permittee shall develop a background water quality database to be used for statistical evaluations during routine monitoring. The Permittee shall collect groundwater samples from each well listed in Condition B.1 for four consecutive quarters and/or use data obtained prior to closure, where appropriate and justified and approved by the Agency, to establish a background database for the constituents listed below.

Parameter	STORET No.	STORET No.	Concentration
Metals	(Total)	(Dissolved)	Limit
Antimony		01095	
Arsenie		01000	
Barium	01007	01005	
Beryllium		01010	
Cadmium-	01027	01025	
Chromium ———	01034	01030	
Cobalt	01037	01035	
Lead	01051	01049	
Mercury —	7190 0	71890	
Nickel		01065	
Selenium — — —		01145	
Vanadium ————	01087	01085	
Volatiles			
Benzene	34030	34235	
Carbon disulfide			
Chlorobenzene	34301	34302	
Chloroform ———	32106	34316	

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1,2 Dichloroethane	-34531	34532
Ethylbenzene	34371	34372
Methyl ethyl ketone		
Styrene		
Toluene	- 34010	34481
Xylene (m,o and p)	34020	
•		
Semi-Volatiles		
Anthracene	34220	34221
Benzo(a)anthracene	34526	34527
Benzo(b)fluoranthene		34231
Benzo(k)fluoranthene	34242	34243
Benzo(a)pyrene	34247	34248
Bis(2-ethylhexyl)		
—phthalate	39100	39103
Butyl benzyl-phthalate	34292	
Chrysene	34320	34321
Cresols (m,o,p)		
Dibenz(a,h)anthracene	34556	34557
Di(n)butyl-phthalate		
Dichlorobenzenes (m.o,p)		
Diethyl-phthalate	34336	34337
2,4 Dimethylphenol	34606	34607
Dimethyl phthalate	34341	34342
2,4 Dinitrophenol	34616 	34617
Di(n)octyl-phthalate		
Fluoranthene	34376	34377
Naphthalene	34696	34443
4 Nitrophenol —	34646	34647
Phenanthrene	34461	34462
Phenol — — —	34694	34466
Pyrene ———	34469	34470
Pyridine — —		
Quinoline	77299	

<u>NOTE</u>: Dissolved values for all inorganic constituents listed above are to be determined from a sample that has been filtered through a 0.45 micron filter membrane.

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- For those parameters in Condition C.1 for which no background values are
 established at the time the permit is issued, the Permitece shall establish
 background values in accordance with the following procedures.
 - a. Background groundwater quality for a monitoring parameter or constituent shall be based on data from quarterly sampling of the well upgradient (or wells) from the waste management unit for one (1) year and from data obtained prior to closure in 1986, where appropriate and justified.
 - b. In developing the data base used to determine a background value for each parameter or constituent, the Permittee shall take a minimum of one sample from each well and a minimum of four samples from the entire system used to determine background groundwater quality each time the system is sampled.
- 3. The sampling constituents listed in Condition C.1 can be modified by Amoco upon establishing baseline quality for the constituents after obtaining four quarters of groundwater samples, and upon Agency approval.

D. SAMPLING AND ANALYTICAL PROCEDURES

The Permittee shall use the techniques and procedures described in Volume 4, Exhibit 6-5 of the Approved Permit Application and as modified by this permit when obtaining and analyzing samples from the groundwater monitoring wells described in Condition B.1.

- 1: Samples shall be collected using the techniques described in Section 4.0 of Exhibit 6-5 of the Approved Permit Application.
- 2. Samples shall be preserved and shipped (when shipped off-site for analysis) in accordance with the procedures specified in Section 5.0 of Exhibit 6-5 of the Approved Permit Application.
- Samples shall be analyzed in accordance with EPA approved procedures.
- 4. Samples shall be tracked and controlled using the chain of custody procedures specified in Section 6.0 of Exhibit 6-5 of the Approved Permit Application.

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E. GROUNDWATER ELEVATION

- 1. The Permittee shall determine the groundwater surface elevation referenced to mean sea level (MSL) at each well each time groundwater is sampled in accordance with Condition G.
- 2. The Permittee shall report the surveyed evaluation of stick up referenced to MSL when the well is installed (with as built diagrams) and every two years, or whenever the elevation changes.
- 3. Elevation, as referenced to MSL, of the bottom of each monitoring well (STORET 72020), is to be reported at least annually. The mandatory measurement shall be taken during the months of April or May and reported by July 15.

F. STATISTICAL PROCEDURES

Amoco will establish a background database for each well in the groundwater monitoring system. Samples will be collected in accordance with the schedule provided in Condition H.3 and compared statistically to the background database by either Tolerence Limits or Prediction Intervals. The statistical procedures proposed by the Permittee will be submitted with the sampling results as shown in Condition H.3. If the statistical test indicates that the difference is significant, the Permittee must immediately repeat the procedure described above for each parameter indicating a significant difference using fresh samples from the monitoring well(s). If this second (resample) round of analysis indicates that the difference is significant, the Permittee must conclude that a statistically significant change has occurred.

G. MONITORING PROGRAM AND DATA EVALUATION

- 1. The Permittee shall collect, preserve, and analyze samples pursuant to Condition D.
- 2. The Permittee shall determine groundwater quality at each monitoring well at the compliance point quarterly for one year. Upon completion of one year of groundwater sampling the Permittee shall demonstrate to the Agency that groundwater has not been impacted from the regulated units. Upon Agency concurrence, the Permittee shall determine groundwater quality at each monitoring well at the compliance point at least semi annually during the active life of a regulated unit (including the closure and post-closure care periods). The

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Permittee shall express the groundwater quality at each monitoring well in a form necessary for the determination of statistically significant increases (i.e., means, variances, etc.).

- 3. The Permittee shall determine the groundwater flow rate and direction in the uppermost aquifer at least annually.
- 4. The Permittee shall determine whether there is a statistically significant increase over the background values for each parameter identified in Condition C.1 each time groundwater quality is determined at the compliance point. In determining whether such an increase has occurred, the Permittee must compare the groundwater quality at each monitoring well specified in Condition B.1 to the background value specified in Condition C.1 in accordance with the statistical procedures specified in Condition F.

H. REPORTING AND RECORDKEEPING

- 1. The Permittee shall enter all monitoring, testing, and analytical data obtained in accordance with Condition G in the operating record. The data must include all computations, using either Tolerance Limits or Prediction Interval comparison methods.
- 2. The statistical method and established background values must be submitted to the Agency within sixty days after the fourth quarter monitoring results are received by the Permittee from the laboratory or by the next reporting date identified in Condition H.3 below.
- 3. The Permittee shall submit the analytical results and measurements required by Conditions E, G.2, and G.3 and the results of the statistical analyses required by Condition G.4 in accordance with the following schedule:

	——Samples to be Collected	
	——————————————————————————————————————	Results Due to
	Months of	the Agency By
	January February	April 15
	April May	———— July 15
	July August	October 15
·	October November	— January 15

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- 4. If the Permittee determines, pursuant to Condition G, that there is a statistically significant increase for any of the parameters specified in Condition C.1 at any monitoring well at the compliance point, the Permittee shall:
 - a. Notify the Agency in writing within seven days indicating what parameters and wells have shown statistical increases and providing calculations.
 - b. Immediately sample the groundwater in all wells and determine the concentration of all constituents identified in Appendix H of 35 IAC 721.
 - c. Establish background values for each Appendix H constituent found in the groundwater in accordance with the procedures in Condition C.2.b. The background values must be expressed in a form necessary for the determination in Condition F.
 - d. Within 90 days submit to the Agency an application for a permit modification to establish a compliance monitoring program meeting the requirements of 35 IAC 724.199. The application must include the following information:
 - i) An identification of the concentration of any 35 III. Adm. Code 721, Appendix H constituents found in the groundwater at each monitoring well at the compliance point
 - ii) Any proposed changes to the groundwater monitoring system at the facility necessary to meet the requirements of Section 724.199
 - iii) Any proposed changes to the monitoring frequency, sampling and analysis procedures, or methods or statistical procedures used at the facility necessary to meet the requirements of Section 724.199
 - For each hazardous constituent found at the compliance point, a proposed concentration limit under 35 IAC 724.194(a)(1) or 724.194(a)(2), or a notice of intent to seek an alternate concentration limit for a hazardous constituent under 35 IAC 724.194(b).

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- e. A corrective action plan for the regulated unit(s) must be addressed under the Main Plant remedial action plan to meet the requirements of 35 IAC 724.200 unless all hazardous constituents identified under Condition H.4.b are listed in 35 IAC 724.194 and their concentrations do not exceed the respective values given in that table or the Permittee has sought an alternate concentration limits under H.4.d.iv for every hazardous constituent identified under Condition H.4.b.
- f. Submit to the Agency all data necessary to justify any alternate concentration limit for a hazardous constituent sought under Condition H.4.d.(iv).
- 5. If the Permittee determines, pursuant to Section G, that there is a statistically significant increase above the background values for the parameters specified in Condition C.I, the Permittee may demonstrate that a source other than a regulated unit caused the increase or that the increase resulted from error in sampling, analysis, or evaluation. The Permittee shall submit a permit modification application in accordance with H.4.d unless the demonstration successfully shows that a source other than the regulated unit caused the increase or that the increase resulted from errors in sampling, analysis or evaluation and the Agency concurs.

To make this demonstration, the Permittee shall:

- Notify the Agency in writing within seven (7) days that he intends to make this demonstration.
- b. Within 90 days submit a report to the Agency which demonstrates that a source other than a regulated unit caused the increase, or that the increase resulted from error in sampling, analysis, or evaluation.
- c. Within 90 days submit to the Agency un application to make any appropriate changes to the detection monitoring program.
- d. Continue to monitor in accordance with the detection monitoring program at the facility.

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I. REQUEST FOR PERMIT MODIFICATION

If the Permittee determines that the detection monitoring program no longer satisfies the requirements of 35 IAC 724 Subpart-F, the Permittee must, within 90 days, submit an application for a permit modification to make any appropriate changes to the program which will satisfy the regulations.

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SECTION-IIII: STANDARD CONDITIONS

GENERAL REQUIREMENTS

- 1. EFFECT OF PERMIT. The existence of a RCRA permit shall not constitute a defense to a violation of the Environmental Protection Act or Subtitle G, except for development, modification or operation without a permit. Issuance of this permit does not convey property rights or any exclusive privilege. Issuance of this permit does not authorize any injury to persons or property or invasion of other private rights, or infringement of state or local law or regulations. (35 Ill. Adm. Code 702.181)
- 2. PERMIT ACTIONS. This permit may be modified, reissued or revoked for cause as specified in 35 Ill. Adm. Code 703.270 through 703.273 and Section 702.186. The filing of a request by the Permittee for a permit modification or revocation, or a notification of planned changes or anticipated noncompliance on the part of the Permittee does not stay the applicability or enforceability of any permit condition. (35 Ill. Adm. Code 702.146) However, any requirements imposed under Corrective Action in Section IV of the Part B Permit, which are subject to administrative or judicial challenge shall be stayed until the appeals process is exhausted.
- 3. SEVERABILITY. The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby. (35 Ill. Adm. Code 700.107)
- 4. PERMIT CONDITION CONFLICT. In case of conflict between a special permit condition and a standard condition, the special condition will prevail. (35 Ill. Adm. Code 702.160)
- 5. DUTY TO COMPLY. The Permittee shall comply with all conditions of this permit except for the extent and for the duration such noncompliance is authorized by an emergency permit. Any permit noncompliance constitutes a violation of the Environmental Protection Act and is grounds for enforcement action; permit revocation or modification; or for denial of a permit renewal application. (35 Ill. Adm. Code 702.141 and 703.242)
- 6. DUTY TO REAPPLY. If the Permittee wishes to continue an activity allowed by this permit after the expiration date of this permit, the Permittee must apply for a new permit at least 180 days before this permit expires, unless permission for a later date has been granted by the Agency. (35 Ill. Adm. Code 702.142 and 703.125)

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- 7. PERMIT EXPIRATION. This permit and all conditions herein will remain in effect beyond the permit's expiration date if the Permittee has submitted a timely, complete application (see 35 Ill. Adm. Code 703.181-703.209) and through no fault of the Permittee the Agency has not issued a new permit as set forth in 35 Ill. Adm. Code 702.125.
- 8. NEED TO HALT OR REDUCE ACTIVITY NOT A DEFENSE. It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. (35 Ill. Adm. Code 702.143)
- 9. DUTY TO MITIGATE. In the event of noncompliance with the permit, the permittee shall take all reasonable steps to minimize releases to the environment, and shall carry out such measures as are reasonable to prevent significant adverse impacts on human health or the environment. (35 Ill. Adm. Code 702.144)
- 10. PROPER OPERATION AND MAINTENANCE. The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory, and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit. (35 Ill. Adm. Code 702.145)
- 11. DUTY TO PROVIDE INFORMATION. The Permittee shall furnish to the Agency, within a reasonable time, any relevant information which, the Agency may request to determine whether cause exists for modifying, revoking and reissuing or terminating this permit, or to determine compliance with this permit. The Permittee shall also furnish to the Agency, upon request, copies of records required to be kept by this permit. (35 Ill. Adm. Code 702.148)
- 12. INSPECTION AND ENTRY. The Permittee shall allow an authorized representative of the Agency, upon the presentation of credentials and other documents as may be required by law, to:
 - Enter at reasonable times upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;

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- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- d. Sample or monitor, at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the appropriate Act, any substances or parameters at any location. (35 Ill. Adm. Code 702.149)

13. MONITORING AND RECORDS. (35 Ill. Adm. Code 702.150)

- a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. The method used to obtain a representative sample of the waste must be the appropriate method from Appendix A of 35 Ill. Adm. Code 721. Laboratory methods must be those specified in Test Methods for Evaluating Solid Waste: Physical/Chemical Methods, SW-846, latest versions; Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, latest versions; laboratory methods approved in writing by IEPA; or an equivalent method as specified in the facility's Waste Analysis Plan.
- b. The Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports and records required by this permit, and records of all data used to complete the application for this permit for a period of at least 3 years from the date of the sample, measurement, report or application. These periods may be extended by request of the Agency at any time. The permittee shall maintain records from all groundwater monitoring wells and associated groundwater surface elevations, for the active life of the facility, and for disposal facilities for the post closure care period as well.
- c. Records of monitoring information shall include:
 - i. The date(s), exact place, and time of sampling or measurements;
 - ii. The individual(s) who performed the sampling or measurements;
 - iii. The date(s) analyses were performed;

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- iv. The individual(s) who performed the analyses;
- v. The analytical technique(s) or method(s) used; and
- vi. The result(s) of such analyses. (35 Ill. Adm. Code 702.150)
- 14. REPORTING PLANNED CHANGES. The permittee shall give notice to the Agency as soon as possible of any planned physical alterations or additions to the permitted facility. For a new HWM facility, the permittee may not commence treatment, storage or disposal of hazardous waste; and for a facility being modified the permittee may not treat, store or dispose of hazardous waste in the modified portion of the facility, until:
 - a. The permittee has submitted to the Agency by certified mail or hand delivery a letter signed by the permittee and a registered professional engineer stating that the facility has been constructed or modified in compliance with the permit; and

b.

- 1. The Agency has inspected the modified or newly constructed facility and finds it is in compliance with the condition of the permit; or
- 2. If, within 15 days of the date of submission of the letter in paragraph (a), the permittee has not received notice from the Agency of its intent to inspect, prior inspection is waived and the permittee may commence treatment, storage or disposal of hazardous waste. (35 Ill. Adm. Code 703.244 and 702.152(a))
- 15. ANTICIPATED NONCOMPLIANCE. The Permittee shall give advance notice to the Agency of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements. For a new facility, the permittee shall not treat, store or dispose of hazardous waste; and for a facility being modified, the permittee shall not treat, store or dispose of hazardous waste in the modified portion of the facility, except as provided in Section 703.280, until:
 - i. The permittee has submitted to the Agency by certified mail or hand delivery a letter signed by the permittee and a registered professional engineer stating that the facility has been constructed or modified in compliance with the permit; and
 - ii. Either:

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- a. The Agency has inspected the modified or newly constructed facility and finds it is in compliance with the conditions of the permit; or
- b. Within 15 days after the date submission of the letter in section i above, the permittee has not received notice from the Agency of its intent to inspect, the permittee may commence treatment, storage or disposal of hazardous waste.

(35 Ill. Adm. Code 702.152(b) and 703.247)

- 16. TRANSFER OF PERMITS. This permit is not transferable to any person except after notice to the Agency. The Agency may require modification of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the appropriate Act. (See Sections 703.260 and 703.270, in some cases modification is mandatory.) (35 Ill. Adm. Code 702.152(c))
- 17. MONITORING REPORTS. Monitoring results shall be reported at the intervals specified in the permit. (35 Ill. Adm. Code 702.152(d))
- 18. COMPLIANCE SCHEDULES. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than specified in 35 Ill. Adm. Code 702.162. (35 Ill. Adm. Code 702.152(e))

19. TWENTY-FOUR HOUR REPORTING.

- a. The Permittee shall report to the Agency any noncompliance with the permit which may endanger health or the environment. Any such information shall be reported orally within 24 hours from the time the Permittee becomes aware of the following circumstances. This report shall include the following:
 - i. Information concerning the release of any hazardous waste that may cause an endangerment to public drinking water supplies.
 - ii. Information concerning the release or discharge of any hazardous waste or of a fire or explosion at the HWM facility, which could threaten the environment or human health outside the facility.
- b. The description of the occurrence and its cause shall include:

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- i. Name, address, and telephone number of the owner or operator;
- ii. Name, address, and telephone number of the facility;
- iii. Date, time, and type of incident;
- iv. Name and quantity of material(s) involved;
- v. The extent of injuries, if any;
- vi. An assessment of actual or potential hazards to the environment and human health outside the facility, where applicable; and
- vii. Estimated quantity and disposition of recovered material that resulted from the incident.
- c. A written submission shall also be provided within 5 days of the time the Permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance including exact dates and times and if the noncompliance has not been corrected; the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The Agency may waive the five day written notice requirement in favor of a written report within fifteen days. (35 Ill. Adm. Code 702.152(f) and 703.245(b))
- 20. OTHER NONCOMPLIANCE. The Permittee shall report all instances of noncompliance not otherwise required to be reported under Standard Conditions 17, 18, and 19, at the time monitoring reports, as required by this permit, are submitted. The reports shall contain the information listed in Standard Condition 19. (35 Ill. Adm. Code 702.152(g))
- 21. OTHER INFORMATION. Where the Permittee becomes aware that it failed to submit any relevant facts in the permit application, or submitted incorrect information in a permit application or in any report to the Agency, the Permittee shall promptly submit such facts or information. (35 Ill. Adm. Code 702.152(h))
- 22. REPORTING REQUIREMENTS. The following reports required by 35 Ill. Adm. Code 724 shall be submitted in addition to those required by 35 Ill. Adm. Code 702.152 (reporting requirements):

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- a. Manifest discrepancy report: If a significant discrepancy in a manifest is discovered, the permittee must attempt to reconcile the discrepancy with the waste generator or transporter. If the discrepancy is not resolved within 15 days after receiving the waste, the permittee must immediately submit to the Agency a letter describing the discrepancy and attempts to reconcile it and a copy of the manifest or shipping paper at issue. (35 Ill. Adm. Code 724.172(b))
- b. Unmanifested waste report: The permittee must submit to the Agency within 15 days of receipt of unmanifested waste an unmanifested waste report on EPA form 8700-13B. (35 Ill. Adm. Code 724.176)
- c. Annual report: an annual report must be submitted covering facility activities during the previous calendar year. (35 Ill. Adm. Code 724.175)
- 23. SUBMITTAL OF REPORTS OR OTHER INFORMATION. All written reports or other written information required to be submitted by the terms of this permit shall be sent to:

Illinois Environmental Protection Agency Bureau of Land -- #33 Permit Section 1021 North Grand Avenue East Post Office Box 19276 Springfield, Illinois 62794-9276

- 24. SIGNATORY REQUIREMENT. All permit applications, reports or information submitted to the Agency shall be signed and certified as required by 35 Ill. Adm. Code 702.126. (35 Ill. Adm. Code 702.151)
- 25. CONFIDENTIAL INFORMATION. Any claim of confidentiality must be asserted in accordance with 35 Ill. Adm. Code 702.103 and 35 Ill. Adm. Code 161.
- 26. DOCUMENTS TO BE MAINTAINED AT FACILITY SITE. The Permittee shall maintain at the facility, until closure is complete, the following documents and amendments, revisions and modifications to these documents:
 - a. Waste analysis plan as required by 35 Ill. Adm. Code 724.113(b) and this permit.

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- b. Personnel training documents and records as required by 35 Ill. Adm. Code 724.116(d) and this permit.
- c. Contingency plan as required by 35 III. Adm. Code 724.153(a) and this permit.
- d. Closure plan as required by 35 Ill. Adm. Code 724.218 and this permit.
- e. Cost estimate for facility post closure care as required by 35 Ill. Adm. Code 724.242(d) and this permit.
- af. Operating record as required by 35 Ill. Adm. Code 724.173(b)(6) and this permit.
- g. Inspection schedules as required by 35 Ill. Adm. Code 724.115(b) and this permit.
- 27. WASTE MINIMIZATION. The Permittee shall certify at least annually that the Permittee has a program in place to reduce the volume and toxicity of hazardous waste that he generates to the degree determined by the Permittee to be economically practicable, and the proposed method of treatment, storage, or disposal is that practicable method currently available to the Permittee which minimizes the present and future threat to human health and the environment, in accordance with 35 Ill. Adm. Code 724.173(b)(9).

GENERAL FACILITY STANDARDS

- 28. NOTICE OF WASTE FROM A FOREIGN SOURCE. The permittee who has arranged to receive hazardous waste from a foreign source must notify the Agency in writing at least four weeks in advance of the date the waste is expected at the facility. (35 Ill. Adm. Code 724.112(a))
- 29. NOTICE OF WASTE FROM OFF SITE. The Permittee who receives hazardous waste from an off-site source (except where the Permittee is also the generator), must inform the generator in writing that the permittee has the appropriate permits for, and will accept, the waste the generator is shipping. The Permittee must keep a copy of this written notice as part of the facility operating record. (35 Ill. Adm. Code 724.112(b))
- 30. GENERAL WASTE ANALYSIS. The Permittee shall comply with the procedures described in the facility's waste analysis plan. (35 Ill. Adm. Code 724.113)

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- 31. SECURITY. The Permittee shall comply with the security provisions of 35 Ill. Adm. Code 724.114(b) and (c).
- 32. GENERAL INSPECTION REQUIREMENTS. The Permittee shall follow the approved inspection schedule. The Permittee shall remedy any deterioration or malfunction discovered by an inspection as required by 35 Ill. Adm. Code 724.115(c). Records of inspections shall be kept as required by 35 Ill. Adm. Code 724.115(d).
- 33. PERSONNEL TRAINING. The Permittee shall conduct personnel training as required by 35 Ill. Adm. Code 724.116 and shall maintain training documents and records as required by 35 Ill. Adm. Code 724.116(d) and (e).
- 34. GENERAL REQUIREMENTS FOR IGNITABLE, REACTIVE, OR INCOMPATIBLE WASTE. The Permittee shall comply with the requirements of 35 Ill. Adm. Code 724.117.

PREPAREDNESS AND PREVENTION

- 35. DESIGN AND OPERATION OF FACILITY. The Permittee shall maintain and operate the facility to minimize the possibility of fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment. (35 Ill. Adm. Code 724.131)
- 36. REQUIRED EQUIPMENT. The Permittee shall equip the facility with the equipment set forth in the facility's contingency plan, as required by 35 Ill. Adm. Code 724.132.
- 37. TESTING AND MAINTENANCE OF EQUIPMENT. The Permittee shall test and maintain the equipment specified in condition 36 as necessary to assure its proper operation in time of emergency. Such testing and maintenance activities are set forth in the approved inspection schedule. (35 III. Adm. Code 724.133)
- 38. ACCESS TO COMMUNICATIONS OR ALARM SYSTEM. The Permittee shall maintain access to the communications or alarm system as required by 35 Ill. Adm. Code 724.134.
- 39. REQUIRED AISLE SPACE. The Permittee shall maintain aisle space as required by 35 III. Adm. Code 724.135 and National Fire Protection Association (NFPA) requirements.
- 40. ARRANGEMENTS WITH STATE AND LOCAL AUTHORITIES AND EMERGENCY RESPONSE CONTRACTORS. The Permittee shall attempt to make emergency response arrangements with State and local authorities and agreements with State emergency response

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teams and emergency response contractors and equipment suppliers as required by 35 III. Adm. Code 724.137. If State or local officials refuse to enter in preparedness and prevention arrangements with the Permittee, the Permittee must document this refusal in the operating record.

CONTINGENCY PLAN

- 41. IMPLEMENTATION OF PLAN. The provisions of the contingency plan must be carried out by the Permittee immediately whenever there is a fire, explosion or release of hazardous waste or hazardous waste constituents which could threaten human health or the environment (35 Ill. Adm. Code 724.151(b)). At a minimum, this includes any fire or explosion which occurs in an area where hazardous waste is being managed (treated, stored or disposed) (35 Ill. Adm. Code 703.241). Within 15 days of any incident that requires implementation of the contingency plan, the owner or operator must submit a written report to the Agency as required by 35 Ill. Adm. Code 724.156(j).
- 42. COPIES OF PLAN. A copy of the contingency plan, including any revisions, must be maintained at the facility and submitted to all local police and fire departments, hospitals and state and local emergency response teams as required by 35 Ill. Adm. Code 724.153.
- 43. AMENDMENTS TO PLAN. The Permittee shall review and immediately amend, if necessary, the contingency plan, as required by 35 Ill. Adm. Code 724.154.
- 44. EMERGENCY COORDINATOR. A trained emergency coordinator shall be available at all times in case of an emergency as required by 35 Ill. Adm. Code 724.155 and 724.156.

MANIFEST SYSTEM RECORD KEEPING AND REPORTING

- 45<u>27</u>. MANIFEST SYSTEM. The Permittee shall comply with the manifest requirements of 35 Ill. Adm. Code 724.171, 724.172 and 724.176.
- 4628. OPERATING RECORD. The Permittee shall maintain a written operating record at the facility in accordance with 35 Ill. Adm. Code 724.173.
- 4729. ANNUAL REPORT. The Permittee shall prepare and submit an annual report to the Agency prior to March 1st of each year in accordance with the requirements of 35 Ill. Adm. Code 724.175.

CLOSURE

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- 48. PERFORMANCE STANDARD. The Permittee shall close the facility as required by 35 IAC 724.211 and in accordance with the approved closure plan.
- 49. AMENDMENT TO CLOSURE PLAN. The Permittee must amend the closure plan whenever there is a change in the expected year of closure or whenever a change in the facility operation plans or facility design affects the closure plan pursuant to 35 IAC 724.212(c).
- 50. NOTIFICATION OF CLOSURE. The Permittee shall notify the Agency at least 60 days prior to the date it expects to begin closure. (35 IAC 724.212(d))
- 51. TIME ALLOWED FOR CLOSURE. After receiving the final volume of hazardous waste, the Permittee shall treat or remove from the site all hazardous waste and complete closure activities in accordance with the schedule(s) specified in the closure plan. (35 IAC 724.213)
- 52. DISPOSAL AND/OR DECONTAMINATION OF EQUIPMENT. When closure is completed, the Permittee shall decontaminate and/or dispose of all facility equipment and structures as required by the approved closure (35 IAC 724.214) plan.
- 53. CERTIFICATION OF CLOSURE. When closure is completed, the Permittee shall submit certification to the Agency in accordance with 35 IAC 724.215 that the facility has been closed as specified by the approved closure plans.
- 54. COST ESTIMATE FOR FACILITY CLOSURE. The Permittee's original closure cost estimate, prepared in accordance with 35 IAC 724.242, must be:
 - a. Adjusted for inflation either 60 days prior to each anniversary of the date on which the first closure cost estimate was prepared or if using the financial test or corporate guarantee, within 30 days after close of the firm's fiscal year.
 - b Revised whenever there is a change in the facility's closure plan increasing the cost of closure.
 - c. Kept on record at the facility and updated. (35 IAC 724.242)
- 55. FINANCIAL ASSURANCE FOR FACILITY CLOSURE. The Permittee shall demonstrate compliance with 35 IAC 724.243 by providing documentation of financial

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assurance, as required by 35 IAC 724.251, in at least the amount of the cost estimates required by the previous Permit Condition. Changes in financial assurance mechanisms must be approved by the Agency pursuant to 35 IAC 724.243.

- 56. LIABILITY REQUIREMENTS. The Permittee shall demonstrate continuous compliance with the requirements of 35 IAC 724.247 and the documentation requirements of 35 IAC 724.251.
- 57. INCAPACTIY OF OWNERS OR OPERATORS, GUARANTORS, OR FINANCIAL INSTITUTIONS. The Permittee shall comply with 35 IAC 724.248 whenever necessary.

POST-CLOSURE

- 58. CARE AND USE OF PROPERTY. The Permittee shall provide post-closure care for the facility as required by 35 Ill. Adm. Code 724.217 and in accordance with the approved post-closure plan.
- 59. AMENDMENT TO POST CLOSURE PLAN. The Permittee must amend the post-closure plan whenever a change in the facility operation plans or facility design affects the post-closure plan or when an unexpected event has occurred which has affected the post-closure plan pursuant to 35 Ill. Adm. Code 724.218(d).
- 60. COST ESTIMATE FOR FACILITY POST CLOSURE CARE. The Permittee's original post closure cost estimate, prepared in accordance with 35 Ill. Adm. Code 724.244, must be:
 - a. Adjusted for inflation either 60 days prior to each anniversary of the date on which the first closure cost estimate was prepared or if using the financial test or corporate guarantee, within 30 days after close of the firm's fiscal year.
 - b. Revised whenever there is a change in the facility's post-closure plan increasing the cost of closure.
 - e. Kept on record at the facility and updated. (35 Ill. Adm. Code 724,244)
- 61. FINANCIAL ASSURANCE FOR POST CLOSURE CARE. The Permittee shall demonstrate compliance with 35 Ill. Adm. Code 724.245 by providing documentation of financial assurance, as required by 35 Ill. Adm. Code 724.251, in at least the amount of the cost estimates required by the previous Permit Condition. Changes in financial assurance mechanisms must be approved by the Agency pursuant to 35 Ill. Adm. Code 724.245.

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- 62. LIABILITY REQUIREMENTS. The Permittee shall demonstrate continuous compliance with the requirements of 35 Ill. Adm. Code 724.247 and the documentation requirements of 35 Ill. Adm. Code 724.251.
- 63. INCAPACITY OF OWNERS OR OPERATORS, GUARANTORS, OR FINANCIAL INSTITUTIONS. The Permittee shall comply with 35 Ill. Adm. Code 724.248 whenever necessary.

LAND DISPOSAL RESTRICTIONS

- 64. DISPOSAL PROHIBITION. Any waste identified in 35 Ill. Adm. Code Part 728, Subpart C, or any mixture of such a waste with nonrestricted wastes, is prohibited from land disposal unless it meets the standards of 35 Ill. Adm. Code Part 728, Subpart D, or unless it meets the requirements for exemptions under Subpart C. "Land disposal" means placement in or on the land and includes, but is not limited to, placement in a landfill, surface impoundment, waste pile, injection well, land treatment facility, or vault intended for disposal.
- 65. DILUTION PROHIBITION. The Permittee shall not in any way dilute a restricted waste or residual from treatment of a restricted waste as a substitute for adequate treatment in order to achieve compliance with 35 Ill. Adm. Code 728, Subpart D (35 Ill. Adm. Code 728.103).

66. WASTE ANALYSIS.

- 1. The Permittee must test his waste or extract developed, using the test method identified in Appendix I of 40 CFR Part 268, or use knowledge of the waste, to determine if the waste is restricted from land disposal.
- 2. For any waste with treatment standards expressed as concentrations in the waste extract, the Permittee must test the treatment residues or an extract of such residues developed using the test method described in Appendix I of 40 CFR Part 268, to assure that the treatment residues or extract meet the applicable treatment standard.
- 3. If the treatment residues do not meet the treatment standards, or if the Permittee ships any restricted wastes to a different facility, the Permittee shall comply with the requirements applicable to generators in 35 Ill. Adm. Code 728.107 and 728.150(a)(1).

67. STORAGE RESTRICTIONS

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- 1. The Permittee shall not store hazardous wastes restricted from land disposal under 35 Ill. Adm. Code Part 728, Subpart C unless such wastes are stored only in containers or tanks, and are stored solely for the purpose of the accumulation of such quantities as is necessary to facilitate proper recovery, treatment, or disposal, and: (1) each container is clearly marked to identify its contents and the date each period of accumulation begins; (2) each tank is clearly marked to identify its contents, the quantity of each hazardous waste received, and the date each period of accumulation begins, as required by 35 Ill. Adm. Code 728.150.
- 2. The Permittee must comply with the operating record requirements of 35 Ill. Adm. Code 724.173.

68. NEW DETERMINATIONS OF PROHIBITED WASTES

Wastes which are prohibited from land disposal under 35 Ill. Adm. Code Part 728, Subpart C, or for which treatment standards have been established under 35 Ill. Adm. Code 728, Subpart D, subsequent to the date of issuance of this permit, shall be subject to the conditions number 54 through 57 above.

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SECTION IIIV: CORRECTIVE ACTION

The Agency may modify this Section when it determines good cause exists for modification of a compliance schedule, such as an act of God, strike, flood or materials shortage or other Force Major Majeure events over which Amoco the Permittee has no control and for which there is no reasonably available remedy.

Given advance written justification from the Permittee, the Agency may, at its discretion, modify the schedules eontained referenced in this Section. and in Attachment C.

The Agency may, at its discretion, provide Amoco-the Permittee with a preliminary copy of major decisions to be issued pursuant to this section for review and comment prior to final issuance of such decisions.

A. INTRODUCTION INVESTIGATIONS AND CORRECTIVE ACTION

- 1. In accordance with Section 3004 of RCRA and 35 IAC 724.201, the Permittee shall institute such corrective action as necessary to protect human health and the environment from all releases of hazardous wastes or hazardous constituents, listed in Appendix H of 35 IAC Part 721, from any solid waste management unit (SWMU) at the facility in Wood River, Illinois. The Product Release Sites (PRSs) will also be subject to necessary corrective action.
- 2. The Permittee has divided the facility into 19 land reuse parcels for potential redevelopment as described in the RFI Phase II/III Project Plan for the Main Plant (Project Plan, URS, 2001). The Illinois EPA approved the Main Plant Project Plan on June 21, 2002. A map of the Main Plant land reuse parcels is presented in Attachment A. Parcels will be investigated, reported on, remediated, and redeveloped as market conditions allow.
- 3. Twenty-one SWMUs and nine Product Release Sites (PRSs) were listed in the 1993

 Permit. The Main Plant Phase I RCRA Facility Investigation (RFI) was completed in

 1995 and 1996 and Agency approval of the Phase I RFI report was issued in June

 2001.

- 4. The Permittee will plans to complete corrective action for the facility SWMUs and (PRSs) through the parcel land reuse investigations. The goal in following this process is to obtain a no further action (NFA) determination for the entire parcel. If the Permittee determines that redevelopment is not likely to occur in a given parcel, the Permittee will follow the corrective action process for the SWMUs and PRSs within the parcel. If the potential for redevelopment of the parcel becomes viable in the future, the Permittee would pursue an NFA determination for the entire parcel at that time. The following land reuse process would be implemented:
- a) Current conditions will be established for the parcel
- b) A Work Plan incorporating the Current Conditions will be developed to investigate data gaps required to properly characterize the area
- c) The investigation, focused on obtaining soil data, will be completed
- d) Data will be analyzed, and a risk assessment will be completed
- e) Identification of the required remedial activities and institutional controls will be made and incorporated into the final Investigation Report
- f) Upon Illinois EPA review and approval of the Investigation Report, a conditional No Further Action letter for soils will be issued for the parcel
- g) An Environmental Land Use Control (ELUC) will be submitted for approval by Illinois EPA
- h) Institutional Controls will be recorded on the property deed following approval of the ELUC
- i) Development of the parcel will proceed
- j) Additional reporting and engineered barrier construction/documentation will be submitted (if necessary)

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- 5. The investigation efforts conducted at each area must be sufficient to characterize contamination associated with the all identified recognized environmental conditions present in the area. The parcel investigations will focus on soil and perched water.
- 6. If the investigation results at a SWMU, PRS, or land reuse parcel identify the need for corrective action, the proposed remediation measures will be provided in the Investigation Report, and will be subject to Agency Approval. Remediation may be conducted prior to Agency approval, but is subject to Agency approval.
- 7. The uppermost aquifer at the facility will be addressed under groundwater corrective action in Section III of the permit, not as part of the land reuse investigations.
- 8. The Permittee may implement Remedial Measures at any time to remove surficial sources of contamination from any unit included in this section. Remedial measures include removal of any obvious contamination, or other immediate measures to alleviate obvious contamination prior to investigative sampling at a unit. All such remedial measures and treatment/disposal of resultant waste must be conducted in accordance with all applicable federal, state and local laws, regulations and ordinances.
- 9. The Permittee will submit Progress Reports for Investigations, including a schedule of parcel priorities, on a quarterly basis in accordance with the June 21, 2002 Agency approval for the Project Plan. The schedule will be subject to modifications by the Agency.
- 10. The status of investigations and corrective action for each SWMU, PRS, and land reuse parcel, as of January 2006 is presented on the tables below (Please note this is noat a complete listing of SWMUs at the facility):

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l	SWMU Status of Corrective Action and Land Reuse Activities				
1	Land Reuse Area	<u>SWMU</u>	<u>Description</u>	Media of Concern	Status of Corrective Action
	8	SMWU 8 (Note 1)	Three Leaded Tank Bottom Disposal Areas	Soil, Groundwater	Phase I RFI completed. Additional soil and groundwater* investigation required. Area 8 Work Plan approved.
	2	SMWU 9	Northeast Sand Pit	Soil, Groundwater	NFA for soils for Area 2. Additional groundwater* investigation required.
	<u>13</u>	<u>SWMU 12 (Note 2)</u>	Southeast Disposal Area	Soil, Groundwater	Phase I RFI completed. Additional soil and groundwater* investigation required.
	<u>4</u>	SWMU 13	API Separator Sludge Landfarm	Soil, Groundwater	NFA for soils and perched water for Area 4. Additional groundwater* investigation required for SWMU 13.
	<u>18</u>	SWMU 14 (Note 3)	North Cell of Spray Pond 1 (NC-SP1) - closed hazardous waste unit	Soil	Undergoing Post-Closure Care. Class 3 Permit Modification for closure by removal submitted November 8, 2002.
	<u>11, 19</u>	SWMU 15 (Note 4)	Spray Ponds Other than NC-SP1	Soil, Groundwater	No further action for Spray Ponds 1, 2, and the Intake Channel based on Phase I RFI. Additional groundwater* investigation requiredfor Spray Pond 3.
	<u>16A</u>	SWMU 16 (Note 6)	Old API Separator	Soil, Groundwater	Phase I RFI completed. Additional soil and groundwater* investigation required.
	<u>6</u>	SWMU 17	Additives Waste Pit	Soil	Phase I RFI completed. No further action is required.
	<u>6</u>	<u>SWMU 18</u>	DAP Spent Filter Cake Storage Area	Soil	Phase I RFI completed. No further action is required.

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	SWMU Status of Corrective Action and Land Reuse Activities				
	Land Reuse Area	<u>SWMU</u>	<u>Description</u>	Media of Concern	Status of Corrective Action
	<u>4</u>	SWMU 21	Former APAC Waste Transfer Area	Soil, Groundwater	NFA for soils for SWMU 21 and Area 4. Additional groundwater* investigation required for SWMU.
	<u>6</u>	SWMU 22	New APAC Waste Transfer Area	Soil, Groundwater	Phase I RFI completed. Additional soil and groundwater* investigation required. Area 6 Work Plan approved.
	<u>6</u>	SWMU 23	Map Spent Filter Cake Storage Area	<u>Soil</u>	Soil remediation required. Area 6 Work Plan approved.
	3	SWMU 24 (Note 5)	APAC Slop Oil Tank 70	Soil, Groundwater	Phase I RFI completed. Additional soil and groundwater* investigation required. Area 3 Work Plan approved.
	<u>8</u>	SWMU 25 (Note 5)	APAC Slop Oil Tank 176	Soil, Groundwater	Phase I RFI completed. Additional soil and groundwater* investigation required. Area 8 Work Plan approved.
	<u>3</u>	SWMU 26	APAC Slop Oil Tank 189, 190, 845, 846	Soil, Groundwater	NFA for soils. Additional groundwater* investigation required. Area 3 Work Plan approved.
	<u>5</u>	<u>SWMU 27</u>	APAC Slop Oil Tank 277 Area	Soil	Additional soil investigation required. Area 5 Work Plan approved.
	<u>9</u>	SWMU 30 (Notes 2 and 5)	Korea Tank Farm Disposal Areas	Soil, Groundwater	To be addressed as part of PRS 8 investigation (see Table E-4). Area 9 Work Plan approved.

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]	SWMU Status of Corrective Action and Land Reuse Activities				
1	Land Reuse Area	SWMU	<u>Description</u>	Media of Concern	Status of Corrective Action
	<u>6</u>	SWMU 31	Waste Phenol Accumulation Area	Soil, Groundwater	Phase I RFI completed. Additional soil and groundwater* investigation required. Area 6 Work Plan approved.
	<u>18</u>	<u>SWMU 33 (Note</u> <u>3)</u>	South Flare Pit	Soil	Undergoing Post-Closure Care. Closure by Removal Certification submitted April 2005.
	<u>16B</u>	SWMU 34 (Note 7)	BP's Sewer System (oil water separator)	Soil, Groundwater	Phase I RFI completed. Additional soil and groundwater* investigation required.
ļ [<u>6</u>	<u>SWMU 36</u>	Liquid Waste Collection Bin	Soil	No further action is required.

Notes:
For most SWMUs, the status of Corrective action is based on determinations made by Illinois EPA in approval for the Main Plant Phase I
RFI Reports, June 2001. The status for the other SWMUs is based on Illinois EPA approval of Land Reuse Investigation Reports, and approval
of Current Conditions Reports/Characterization Work Plans for land reuse parcels.
* The uppermost aquifer at the facility will be addressed under groundwater corrective action in Section III of the permit, not as part of the land
reuse investigations.
(1) Field screening techniques may be used to attempt to locate the disposal areas to determine the presence of lead, crude oil, etc. to determine if
any further investigation is warranted. However, field screening must be supplemented with detailed laboratory analysis if the goal of any soil
sampling/analysis effort is to show that no further corrective actions at these units are necessary.
(2) It should be noted that screening methods must be supplemented with actual laboratory analysis to (1) verify the results of the field screening
tests and (2) establish the horizontal and vertical extent of contaminated soil at this SWMU.

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(3) No corrective action is necessary at this unit unless warranted under the groundwater monitoring program required by this permit or if
undertaken by the Permittee.
(4) A Land Reuse investigation has been completed at Spray Pond 3 and exceedances of remediation objectives have been identified
(5) Field screening must be supplemented with detailed laboratory analysis if the goal of any soil sampling/analysis effort is to show that no further corrective actions at these units are necessary.
(6) Borings should be conducted in the vicinity of this SWMU to determine the nature of the soil present beneath the concrete. In the event that the Permittee and the Agency agree that the soil present beneath the concrete is not a threat to human health or the environment then the integrity of the concrete should be evaluated, and, if necessary, remedial actions should be conducted to restore its integrity or other containment measures should be taken.
(7) This SWMU consists of the "current" API Separator and its immediate connections.

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PRS Status of Corrective Action and Land Reuse Activities				
<u>Land Reuse</u> Area	PRS	Description	Media of Concern	Status of Corrective Action
2	PRS 1	Former Tank 228 Dike Area	Soil	NFA for soils for Area 2.
<u>8</u>	PRS 2	Former Tank 246 Dike Area	Soil	Investigation required for PRS 2. Area 8 Work Plan approved.
<u>5</u>	PRS 3	Waste Oil Leak Area	Soil	Area 5 Work Plan approved. Investigation required for PRS 3.
Parts of 2, 3, 6, 7, 8, and 10	PRS 4	Hydrocarbons on the water table	Groundwater	Continuous hydraulic control and product recovery at the facility in accordance with the Permit.
1, 7, 8, and a part of 2	PRS 5	North Tank Farm	<u>Soil</u>	NFA for soils for Areas 1 and 2. Areas 7 and 8 Work Plans approved. Investigation required for Areas 7 and 8.
Parts of 2 and 10	<u>PRS 6</u>	East Tank Farm	Soil	NFA for soils for Area 2. Area 10 Work Plan approved. Investigation required for Area 10.
12	PRS 7	South Tank Farm	Soil	Area 12 Work Plan to be developed. Investigation required for PRS 7.

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PRS Status of Corrective Action and Land Reuse Activities				
<u>Land Reuse</u> <u>Area</u>	PRS	Description	Media of Concern	Status of Corrective Action
<u>9</u>	PRS 8	Korea Tank Farm	<u>Soil</u>	Area 9 Work Plan approved. Investigation required for PRS 8.
<u>NA</u>	PRS 9	Gasoline Piping Manifold	Soil	Investigation required for PRS 9.

Note:

PRS 9 is due to a release from a gasoline piping manifold. The location of PRS 9 is currently unknown.

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- 1. Conducting a RCRA Facility Investigation (RFI) to determine whether releases of hazardous wastes and hazardous constituents have occurred from any solid waste management unit (SWMU) at this facility, and if so, the nature and extent of the release(s)₁.
- 2.Based upon the results of the RFI, developing and implementing a Corrective Action Plan, which describes the necessary corrective actions, which will be taken. The required corrective actions shall be those actions necessary to protect human health and the environment from all releases of hazardous wastes or hazardous constituents, listed in Appendix H of 35 IAC Part 721, from any of the SWMUs determined to pose an environmental threat by the RFI required under the terms and conditions of this permit.

3— a)

B. CONDUCTING THE RCRA FACILITY INVESTIGATION

The Permittee must conduct a RCRA Facility Investigation to determine the nature and extent of releases of hazardous wastes and hazardous constituents from certain SWMUs_at the subject facility. This RFI shall be carried out in three phases. Each phase will provide for a more detailed evaluation of each Solid Waste Management UnitSWMU_identified. The requirements for the RFI are provided in Attachment D to the permit.

1. The SWMUs were in the . The Main Plant Phase I RFI was completed in 1995 and Agency approval of the Phase I RFI report was issued in June 2001. The status of corrective action f each SWMU presented on the table below:

Based upon the results of the RCRA Facility Assessment which was conducted by the Agency for this facility, the SWMUs identified in the table below must be evaluated in the RFI for potential releases to the environment. This Table also contains information identifying what the forms of the RFI should be for each of the SWMUs of concern. (Please note that this is not a complete listing of SWMUs at the subject facility.):

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	SWMU No.	Environmental Medi
Unit Name	From RFA	of Concern
Three Leaded Tank Bottom Disposal Areas (Note 1)	8	Soil
- Disposal Areas (Note-1) Northeast Sand Pits	9	Soil
SE Disposal Area (Note 2)	·	Soil.
		Groundwate
API Separator Sludge Landfarm (Note-1)	13	Soil
North Cell/Spray Pond 1 (Note 3)	14	Soil
Spray Ponds Other than North Cell/Spray Pond 1 (Note 4)	15	Soil
Old API Separator (Note 6)	16	Soil
Additives Waste Pit (Note 1)	17	Soil
DAP Spent Filter Cake Storage Area (Note 1)	18	Soil
Former APAC Waste Transfer Area	2	Soil
New APAC Waste Transfer Area	22	Soil
Map Spent Filter Cake Storage Area	23	Soil
APAC Slop Oil Tank 70 (Note 5)	24	Soil
APAC Slop Oil Tank 176 (Note 5)		Soil
APAC Slop Oil Tanks 189, 190	26	————Soil

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-845, and 846 (Note 6)		
Korea Tank Farm Disposal Areas (Notes 2 and 5)	30	——————————————————————————————————————
Waste Phenol Accumulation	31	Soil

Soil

-Soil

Soil

-Area (Note 7)

-(Note 9)

South Flare Pit (Note 3)

Amoco's Sewer System (Note 8)

Liquid Waste Collection Bid

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(1)	Field screening techniques may be used to attempt to locate the disposal areas prior to the field screening techniques to be used to determine the presence of lead, crude oil, etc. to determine if any further investigation is warranted. However, field screening must be supplemented with detailed laboratory analysis if the goal of any soil sampling/analysis effort is to show that no further corrective actions at these units are necessary.
(2)	It should be noted that screening methods must be supplemented with actual laboratory analysis to (1) verify the results of the field screening tests and (2) establish the horizontal and vertical extent of contaminated soil at this SWMU.
(3)	No corrective action is necessary at this unit unless warranted under the groundwater monitoring program required by this permit or if undertaken by Amoco.
(4)	The sludges in these ponds should be analyzed for their potential effect to the underlying soil and the groundwater.
(5)	Field screening must be supplemented with detailed laboratory analysis if the goal of any soil sampling/analysis effort is to show that no further corrective actions at these units are necessary.
(6)	A few borings should be conducted in the vicinity of this SWMU to determine the nature of the soil present beneath the concrete. In the event that Amoco Oil and the Agency agree that the soil present beneath the concrete is not a threat to human health or the environment then the integrity of the concrete should be evaluated, and, if necessary, remedial actions should be conducted to restore its integrity or other containment measures should be taken.
(7)	Further information should be provided to the Agency regarding the integrity of the concrete present around this unit and the historical and current use of this unit.

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		connections.
	(9) —	- A cleanup of surficial staining and a possible lip on the bin to prevent
•		recurrences of oil leaks from this unit should be conducted. If these action
		have been or will be conducted, then no further action will be required by
		Agency for this unit.

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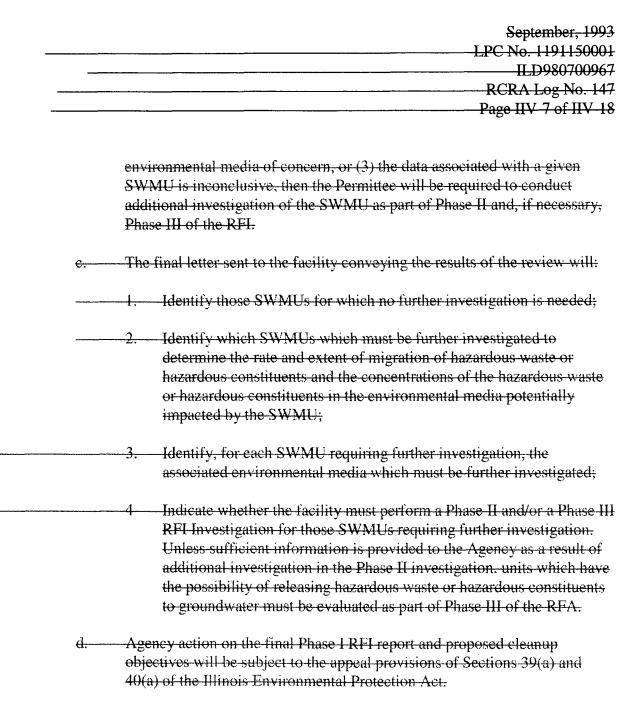
- 2. The Permittee shall submit to the Illinois Environmental Protection Agency's Division of Land Pollution Control (Agency's DLPC) Permit Section, within 120 days after the effective date of this permit, a written RCRA Facility Investigation (RFI) Phase I Workplan. In general, the Phase I RFI Workplan must contain the following:
 - a. General information regarding the Amoco Oil Company Riverfront facility in Wood River. Illinois.
 - b. Information, as it is available, regarding each SWMU identified in Condition V.B.1 above which (1) characterizes the unit, (2) describes its history of operations, and (3) documents the unit's integrity.
 - e. Proposed procedures, including field activities, to determine the absence or presence of releases of hazardous waste or hazardous constituents to the environmental media of concern from each SWMU as identified in Condition IV.B.1 above. Note that Condition IV.B.1 also contains information regarding what the focus of the Phase I RFI should be for the SWMUs of concern.

More specific requirements regarding what must be contained in the Phase I Workplan are contained in Attachment C to this permit.

- 3. The Agency's DLPC will approve, approve with modifications, or disapprove the Phase I Workplan in writing and provide comments regarding the necessary corrections or modifications.
 - a: Within 60 days of receipt of such comments, the Permittee must modify the plan or submit a new plan for the Agency's DLPC approval.
 - b. Within 30 days of the Agency's DLPC approval of the RFI Phase I Workplan, the Permittee shall begin implementing the Workplan according to the terms and schedule in the Workplan.

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- c. Agency action on the Phase I Workplan will be subject to the appeal provisions of Sections 39(a) and 40(a) of the Illinois Environmental Protection Act.
- 4. The Permittee must submit a report documenting the efforts carried out as set forth in the approved RFI Phase I Work Plan in accordance with the schedule established in the approved Workplan. This report must be organized so as to present a comprehensive and coherent description of the sources, nature and extent of soil contamination discovered at each SWMU during the Phase I RFI. The report must also discuss and evaluate the results of the Phase I RFI associated with each SWMU and include conclusions related to the need for additional investigation at each SWMU as part of a Phase II RFI. This report must be prepared in accordance with (1) the Data Management Plan which is to be a part of the RFI Phase I Workplan (see Item III.F of Attachment C to this permit) and (2) any modifications to the Workplan imposed by the Agency as part of its approval of the workplan.
 - a. Since the report must include conclusions related to the need for a Phase II investigation, it must contain proposed concentrations which will be used to make this determination. Justification for these proposed values must also be included in the report. Development of the proposed values must be carried out in accordance with USEPA and IEPA requirements, regulations, and guidance.
- 5. Following the submittal of the RFI Phase I report, the Agency's DLPC will review the submitted data and notify the Permittee in writing of the results of the review. This notification will discuss the status of each of the SWMUs evaluated as part of Phase I of the RFI.
 - a. If the Agency's DLPC determines, based upon the data provided within and obtained from the Phase I Workplan for each SWMU investigated, that (1) there is no potential for release from that SWMU to the environmental media of concern and (2) there has been no release of hazardous wastes or hazardous constituents to the environmental media of concern from that SWMU, then no further action will be required for that SWMU.
 - b. If the Agency's DLPC determines, based on the data from the Phase I RFI for each SWMU investigated, that (1) there has been a release to any environmental media of concern, (2) there currently is a release to any



6. If the Permittee is notified in writing in accordance with Condition V.B.6.c that any SWMUs identified in Condition V.B.1 above must be included in Phase II of the RFI, then the Permittee must develop and submit a Phase II RFI Workplan. Phase II of the RFA shall focus on determining the rate and extent of migration of hazardous waste or hazardous constituents and the concentrations of the hazardous waste or hazardous constituents in the soil and/or air potentially impacted by the SWMU. Only the media potentially impacted by each SWMU as identified in the Agency notification set forth in Condition V.B.6.c above must be investigated. Such a workplan must be submitted no more than 90 days after the facility is notified in

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writing in accordance with Condition V.B.6.c above. The requirements for a Phase II RFI Workplan are contained in Attachment C to this permit.

- 7. The Agency's DLPC will approve, modify and approve, or disapprove the Phase II workplan in writing and provide comments regarding the required corrections or modifications.
 - a. Within 60 days of the receipt of such comments, the Permittee must modify the plan or submit a new plan for the Agency's DLPC approval.
 - b. Within 30 days of the Agency's DLPC approval of the RFI Phase II
 Workplan, the Permittee shall begin implementing the plan according to the terms and schedule established in the the Phase II Workplan.
 - c. Agency action on the Phase II workplan will be subject to the appeal provisions of Sections 39(a) and 40(a) of the Illinois Environmental Protection Act.
- 8. The Permittee must submit a report documenting the efforts carried out in accordance with the approved RFI Phase II Workplan in accordance with the schedule established with in the Phase II Workplan. This report must be prepared in a manner which is similar to that specified in Condition V.B.5 above.
 - a. Should the Permittee wish to propose target soil cleanup objectives for corrective measures, such a proposal must be submitted to the Agency upon submittal of the RFI Phase II report. Such a request must consider distance from the subject SWMU(s) to potential receptors, 35 IAC 620 groundwater quality standards, and it must provide an assessment of potential threats to human health and the environment in proposing soil, surface water or groundwater target cleanup objectives (i.e., the proposal should include a site and contaminant specific risk assessment which ensures that alternative target cleanup objectives will not allow the groundwater quality standards to be exceeded, or pose a threat to human health and the environment). The focus of any quantitative risk assessment for direct exposure to the residual soils may be based on an industrial setting, provided that restrictions are placed on the deed to the property that no residential activity may occur on the property and (2) access to the property is restricted. This risk assessment must be developed in accordance with USEPA and IEPA requirements,

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	regulations and guidance. The Agency will establish cleanup objectives for corrective measures if no objectives are proposed by the Permittee.
Follo	wing submittal of the RFI Phase II report, the Agency's DLPC will review the
	obtained from the RFI Phase II investigation and notify the Permittee in writing results.
a	If the Agency determines that there is a potential that groundwater has been impacted by a release of hazardous wastes or hazardous constituents from any SWMU evaluated during the Phase II investigation, then the Permittee must conduct Phase III of the RFI for such SWMUs. The purpose of the Phase III investigation of the RFI will be to define the extent of releases, both on site and off site, to the groundwater from SWMUs for which the results of the Phase II investigation indicate a release to groundwater. The requirements associated with a Phase III Investigation are contained in Attachment C to this permit.
b. —	If the Agency's DLPC determines that a RFI Phase III investigation is not required, based on data obtained from the RFI Phase II investigation, the Agency reserves the right to require that corrective measures be conducted for the SWMU(s) of concern to address releases identified through the Phase I and Phase II investigations.
c	The Agency's response to the Phase II report will:
	i. Identify those SWMUs and associated environmental media for which Phase III of the RFI must be conducted; and,
	ii. Identify those SWMUs and associated environmental media for which corrective action is required, although no Phase III investigation is required.
d. —	Agency action on the final RFI Phase II report will be subject to the appeal provisions of Sections 39(a) and 40(a) of the Illinois Environmental

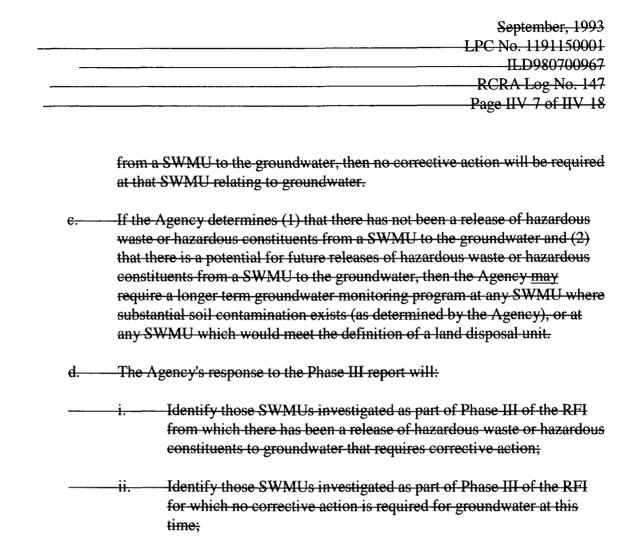
10. The permittee may propose conducting Phase II and III concurrently for efficiency since considerable Phase III work has already been completed. Within 90 days of

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notification of the need for a Phase III investigation, the Permittee shall submit a plan for conducting Phase III of the RFI. The Agency's DLPC will approve, modify and approve, or disapprove and provide comments to the Permittee as to the corrections or modifications needed for the RFI Phase III Workplan.

- a. Within 60 days of receipt of such comments, the Permittee must modify the plan or submit a new plan for the Agency's DLPC approval.
- b. Within 30 days of the Agency's DLPC approval of the RFI Phase III
 Workplan, the Permittee shall begin implementing the plan according to the terms and schedule established within the Workplan.
- c. Agency action on the Phase III workplan will be subject to the appeal provisions of Sections 39(a) and 40(a) of the Illinois Environmental Protection Act.
- 11. Within 120 days of receipt of the Agency's response identified in Condition V.B.10.c, the Permittee shall submit to the Agency's DLPC a Corrective Action Plan (CAP), in accordance with the requirements outlined in Condition V.C. for those SWMUs identified in the response as requiring corrective action that do not need to evaluate as part of the Phase III investigation.
- 12. The Permittee must submit a report documenting the efforts carried out in accordance with the approved RFA Phase III Workplan in accordance with the schedule set forth in that workplan. This report must be prepared in a manner which is similar to that specified in Condition V.B.5.
- 13. Following submittal of the RFI Phase III report, the Agency's DLPC will review the data contained in the report and notify the Permittee in writing of the results.
 - a. If the Agency determines that there has been a release of hazardous waste or hazardous constituents from a SWMU to the groundwater, then the Permittee must perform corrective action, as necessary, to protect human health and the environment.
 - b. If the Agency determines that there (1) has not been a release of hazardous waste or hazardous constituents from a SWMU to the groundwater and (2) is no potential for releases of hazardous waste or hazardous constituents



e. Agency action on the Phase III Workplan will be subject to the appeal provisions of Sections 39(a) of the Illinois Environmental Protection Act.

allowed to remain in place.

Identify those land based SWMUs_investigated as part of the Phase III RFI for which a longer term groundwater monitoring program must be established. "Land based SWMUs" are SWMUs where waste, contaminated soil and/or contaminated groundwater are

If the Agency's notification identified in Condition V.B.1.d above requires that corrective action be performed for releases of hazardous waste or hazardous constituents to the groundwater from certain SWMUs, then the Permittee must submit a Corrective Action Plan for this release from the SWMU(s) of concern which meets the requirements of Condition V.C for review and approval. This plan must be submitted within a time to be determined of the date that the notification identified in Condition V.B.1.d is received by the Permittee.

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- 15. If the Agency's notification identified in Condition V.B.1.d requires that a longer term groundwater monitoring program be established for certain SWMUs, then the Permittee must submit such a plan within 120 days after receiving this notification. This plan must be developed in accordance with the general procedures set forth in Section V.D.4 of Attachment C. The Agency's DLPC will approve, modify and approve or disapprove and provide comments to the Permittee as to corrections or modifications needed for the program.
 - a. Within sixty (60) days of receipt of such comments, the Permittee must modify the plan or submit a new plan for the Agency's approval.
 - b. Within thirty (30) days of the approval of the plan, the Permittee shall begin implementing the plan in accordance with the terms and schedule established in the plan.
 - c. Agency action on the groundwater monitoring plan will be subject to the appeal provisions of Sections 39(a) and 40(a) of the Illinois Environmental Protection Act.

C. CORRECTIVE ACTION REQUIREMENTS

If, in accordance with Conditions V.B.10 and/or V.B.1, it is determined that corrective actions must be taken in response to releases from any SWMU, then the Permittee shall develop a Corrective Action Plan (CAP). This plan must be submitted within 120 days after receipt of the notification from the Agency that corrective actions are necessary to protect human health and the environment from observed releases from SWMUs at the facility. The purpose of the CAP is to develop and evaluate corrective action alternative(s) and evaluate corrective action measure(s) which will satisfy the target cleanup objectives specified by the Agency's DLPC. The proposed corrective actions must be sufficient to protect human health and the environment from the observed release.

The Agency's DLPC will approve, modify and approve, or disapprove and provide comments to the Permittee as to the corrections or modifications needed for the CAP. Within 60 days of receipt of such comments, the Permittee must modify the CAP or submit a new CAP for the Agency's DLPC approval. The Agency's DLPC approval of one or more of the corrective measure(s) will consider, at a minimum, performance, reliability, implementability, safety, human health and the environmental impact of the measure(s). The formal approval and incorporation of the selected corrective measure(s) into the Part B

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permit will be via the Class 2 Permit Modification procedures identified in 35 IAC 703.282. The Permittee shall begin implementing the selected corrective measure(s) according to the terms and schedule identified in the modified permit.

DB. FINANCIAL ASSURANCE FOR CORRECTIVE ACTION

1. The Permittee shall prepare a cost estimate for the completion of any corrective measure(s) required under this permit, in order to provide financial assurance for completion of corrective action, as required under 35 IAC 724.201(b). Such a cost estimate will be based upon the cost of contamination investigations and assessments for the SWMU(s), and design, construction, operation, inspection, monitoring, and maintenance of the corrective measure(s) to meet the requirements of 35 IAC 724.201, Attachment C and this permit. The revised cost estimate for corrective action must be submitted to the Agency annually by April 1. This cost estimate must be submitted to the Agency's DLPC and revised according to the following schedule:

 <u>Facility Submission</u>	<u>Due Date</u>
Initial Cost Estimate (with Workplan)	—120 days after the RFI Phase I —effective date of this permit
Revised Cost Estimate (_with the initial submittal of each RFI Report)	Upon written Agency request

2. The Permittee shall demonstrate continuous compliance with 35 IAC 724.201 by providing documentation of financial assurance using a mechanism specified in 35 IAC 724.243, in at least the amount of the cost estimate required under Condition IIV.DC.1 the words "completion of corrective action" shall be substituted for "closure and/or post-closure", as appropriate in the financial instrument specified in 35 IAC 724.251. The documentation shall be submitted to the Agency's DLPC within 60 days after the submittal of the initial or revised cost estimates required under Condition IIV.D.C.1. The Agency's DLPC may accept financial assurance for completion of corrective action in combination with another financial mechanism that acceptable under 35 IAC 724.246 at its discretion.

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Whenever the Permittee becomes aware that any SWMU, that was not found to be releasing hazardous waste or hazardous constituents during the RFI, or was not addressed under the corrective action requirements of this permit, may have started to release hazardous waste or hazardous constituents, the Permittee shall report this information to the Agency's DLPC in writing within thirty (30) days of discovery. Upon the Agency's written request, the Permittee shall determine the nature and extent of the contamination by following the procedures set forth in Conditions IIV.B through and IIV.CD, beginning on the date of notification, rather than on the effective date of the permit.

FD. NOTIFICATION REQUIREMENTS FOR AN ASSESSMENT OF NEWLY-IDENTIFIED SOLID WASTE MANAGEMENT UNIT(S)

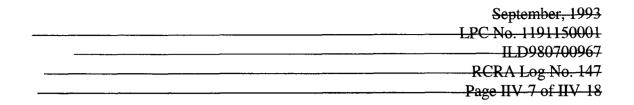
- 1. The Permittee shall notify the Agency's DLPC in writing of any newly-identified SWMU(s) discovered during the course of groundwater monitoring, field investigations, environmental audits, or other means, no later than sixty (60) calendar days after discovery. The notification shall provide the following information, if available:
 - a. The location of the newly-identified SWMU in relation to other SWMUs on a scaled map or drawing;
 - b. The type and past and present function of the unit;
 - c. The general dimensions, capacities, and structural description of the unit (available drawings and specifications provided);
 - d. The period during which the unit was operated;
 - e. The specifics on all materials, including but not limited to, wastes and hazardous constituents, that have been or are being managed at the SWMU, to the extent available; and
 - f. The results of any relevant available sampling and analysis which may aid in determining whether releases of hazardous wastes or hazardous constituents have occurred or are occurring from the unit.

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- 2. If the submitted information demonstrates a potential for a release of hazardous waste or hazardous waste constituents from the newly identified SWMU; it will be investigated and reported in accordance with Condition II.A., the Agency's DLPC may request in writing, that the Permittee prepare a Solid Waste Management Unit (SWMU) Assessment Plan and a proposed schedule of implementation and completion of the Plan for any additional SWMU(s) discovered subsequent to the issuance of this Permit.
- 3. Within 120 calendar days after receipt of the Agency's DLPC request for a SWMU Assessment Plan, the Permittee shall prepare a SWMU Assessment Plan consistent with the requirements of V.B through V.D above. This SWMU Assessment plan must also propose investigations, including field investigations if necessary, to determine the release potential to specific environmental media for the newly identified SWMU. The SWMU Assessment Plan must demonstrate that the sampling and analysis program, if applicable, is capable of yielding representative samples and must include parameters sufficient to identify migration of hazardous waste and hazardous constituents from the newly discovered SWMU(s) to the environment.
- 4. After the Permittee submits the SWMU Assessment Plan, the Agency's DLPC shall either approve, approve with conditions or disapprove the Plan in writing. If the plan is approved, the Permittee shall begin to implement the Plan within forty five (45) calendar days of receiving such written notification. If the Plan is disapproved, the Agency's DLPC shall notify the Permittee in writing of the Plan's deficiencies specify a due date for submittal of a revised plan.
- 5. The Permittee shall submit a report documenting the results of the approved SWMU Assessment Plan to the Agency's DLPC in accordance with the schedule in the approved SWMU Assessment Plan. The SWMU Assessment Report shall describe all results obtained from the implementation of the approved SWMU Assessment Plan.

G. <u>COMPLETION OF CORRECTIVE ACTION</u>

1: The Permittee shall complete those corrective actions contained in the Corrective Action Plan approved in accordance with Condition V.C above. The Permittee may request the Agency's DLPC to consider corrective action complete at any point



during compliance with this permit. The petition should include a demonstration of the following:

- a. The Permittee shall demonstrate that there have been no releases of hazardous waste or hazardous constituents to any media from the SWMUs; or
- b. The Permittee shall demonstrate that all releases of hazardous waste or hazardous constituents to all media targeted within the RFI for investigation have been remediated to the target cleanup objectives specified within the approved Corrective Measures Plan, and shall also describe how releases will be prevented in the future; or
- Some combination of the above demonstrations.
- Appropriate documentation and certification must accompany such a demonstration.
- The Permittee shall be notified in writing if the Agency's DLPC approves the request that the corrective actions can be considered complete. The notification from the Agency's DLPC to the Permittee may include a release from the financial requirements of Condition IF above.
- 2. A determination of no further action shall not preclude the Agency's DLPC from requiring continued or periodic inspections of the SWMU(s) or continued or periodic monitoring of the specified environmental media when site specific circumstances indicate that releases of hazardous wastes including hazardous constituents are likely to occur, if necessary to protect human health and the environment. Any requirement for long term groundwater monitoring may only be required at SWMU where substantial soil contamination exists (as determined by the Agency) or at any SWMU which would meet the definition of a land disposal unit.
- 3. A determination of no further action shall not preclude the Agency's DLPC from requiring further investigations, studies, or remediation at a later date, if new information or subsequent analysis indicates a release or likelihood of a release from a SWMU at the facility that is likely to pose a threat to human health of the environment. In such a case, the Agency's DLPC shall initiate a permit modification to rescind the determination no further action.

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SECTION-VIII: GROUNDWATER CORRECTIVE ACTION PROGRAM

A. <u>SUMMARY</u>

Hazardous constituents released from the Amoeo Main PlantPermittee's facility have been detected in the groundwater at and beyond the point of compliance at concentrations above background values. Therefore, a corrective action program meeting the requirements of 35 IAC 724.200 must be implemented at the Main Plant Propertyfacility. The corrective action program provided herein is considered to be an interim measure. The interim corrective action shall be maintained until such time that the RCRA Facility Investigation and Feasibility Study has ve been completed and a Final Corrective Measure has been approved. The interim corrective action to manage groundwater is to control groundwater flow, or apply alternative innovative technologies as approved by the Agency. Groundwater is pumped from the uppermost aquifer to provide containment, and is treated at the City of Wood River Waste Water Treatment Plant (WWTP). FPH is also pumped from the uppermost aquifer.

The interim corrective action program required by this permit includes:

- 1. Control of the horizontal and vertical flow of the entire vertical column of groundwater in the uppermost aquifer such that groundwater flow is towards the interior of the Main Plant-facility. This control of groundwater flow will be accomplished by withdrawing sufficient quantities of groundwater from the uppermost aquifer. Such flow control is necessary as an interim measure to prevent further contaminant migration of on-site releases of product or waste, beyond the boundaries of the Amoco Main Plant PropertyPermittee's facility. The groundwater flow is also influenced by nearby industrial pumping centers.
- 2. Verification that the flow of groundwater is adequately controlled as required by Item 1.
- 3. Monitoring the quality and movement of the groundwater in the uppermost aquifer beneath the Main Plant Property of Amocofacility to determine the effectiveness of the interim corrective action program.
- 4. Removing refinery product from above the water table uppermost aquifer.

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B. IMPLEMENTATION

- The Permittee shall submit a Groundwater Corrective Action Monitoring program to the Agency within 60 days of the effective date of the permit in the form of a permit modification to include at a minimum: well location/construction, groundwater protection standards, a groundwater monitoring program, sampling and analysis procedures and reporting/recordkeeping information. If, within 60 days of the effective date of this permit, the Permittee fails to submit an adequate corrective action monitoring proposal, the Permittee shall implement the groundwater interim corrective action program established in this section. On that date, the groundwater monitoring and corrective action requirements set forth in this permit shall supersede those previously approved by the Agency.
- 12. The Permittee shall carry out the interim corrective actions specified in this permit on the groundwater present at the Main-Plant Property of Amocofacility. The uppermost aquifer at this facility is a sand and gravel aquifer located approximately 30 feetdeep below the ground surface and extending to a depth of about 101->113 feet below ground surface to the top of the bedrock surface. This aquifer is commonly referred to as the "American Bottoms."

C. WELL LOCATION AND CONSTRUCTION

1. 1. The Permittee shall maintain the following groundwater monitoring wells and cone of depression wells at the locations specified on the map presented in Figure 2-1 of Attachment A.

Well Screen Interval (ft MSL) (2) 378.85 378.85 392.71 411.47 391.47 408.00 406.80 386.80 386.72 NA 407.11-387.11 406.58-386.58 405.65-385.65 410.50-390.90 415.16-380.16 ₹ ₹ Screen Interval (ft bgs) (2) 14.5-49.5 23.5-43.5 40.0-60.0 40.0-60.0 14.5-49.5 30.0-20.0 29.0-49.0 38.7-58.7 20.4-40 30-50 25-45 ₽ ₹ Ϋ́ Well Depth Elevation (ft MSL) 380.16 387.95 386.72 367.90 388.00 386.80 387.49 385.65 390.90 379.85 391.47 386.81 386.58 392.71 Well Depth (ft bgs) 49.5 49.5 57.4 40 잆 2 5 49 4 29 22 8 8 E S Groundwater Quality Sampling Wells Group A Stick Up Length -0.50 -0.32 -0.26 -0.39 -0.19 -0.38 2.10 -0.27 1.45 2.24 2.20 1.35 2.77 2.17 Ground Surface Elevation (# MSL) (1) 428.64 429.99 445.78 445.89 441.42 446.86 442.82 443.08 446.53 430.60 432.94 435.24 431.07 445.01 Top of Casing (ft MSL) 430.88 429.49 446.15 433.37 445.02 443.52 432.62 434.98 430.80 446.46 445.25 445.39 447.24 446.67 BP Well No. G-01R G-29R G-5B G-22 G-33 H-36 G-35 G-27 G-34 G-31 9-5 9 9 9-5 IEPA Well No. G36* (*3,4,5) G-5B* (3,4) G69R* (3,4) G002 (3) G073* G045* G062* G067* G74L* G75L* G013 G016 G046 G71L

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IEPA Well No.	BP Well No.	Top of Casing (ft MSL) (1)	Ground Surface Elevation (ft MSL) (1)	Stick Up Length	Well Depth (ft bgs)	Well Depth Elevation (ft MSL)	Well Screen Interval (ft bgs) (2)	Well Screen Interval (ft MSL) (2)
		Groundw	ater Quality Sampling V	Vells Group B				
G004* ⁽³⁾	<u>B-4R</u>	444.05	442.13	1.92	<u>59</u>	382.42	<u>39.0-59.0</u>	402.42- 382.42
<u>G055*</u>	<u>G-15</u>	447.39	<u>444,76</u>	2.63	<u>56</u>	388.90	35.0-55.0	<u>409.90-</u> <u>389.90</u>
G063*	<u>G-23</u>	430.17	<u>430.48</u>	<u>-0.31</u>	48	382,50	<u>28-48</u>	402.50- 382.50
<u>G065</u>	<u>G-25</u>	444.10	444.47	-0.37	<u>55</u>	389.50	<u>35-55</u>	409.50- 389.50
G066 <u>*</u>	<u>G-26</u>	442.05	442.40	<u>-0.35</u>	<u>55</u>	387.40	<u>35-55</u>	407.40- 387.40
G068*	<u>G-28</u>	441.69	442.22	<u>-0.53</u>	<u>50</u>	390.60	28-50	412.60- 390.60
G084*		433.69	434.02	-0.33	45	389.02	<u>25.0-44.8</u>	409.02- 389.02
G18 (3,4)	<u>H-28</u>	447.72	445.04	2.68	50.4	391.92	NA NA	<u>NA</u>
G30R	<u>H-30R</u>	<u>435.36</u>	<u>432.49</u>	2.87	42.8	388.21	<u>22.4-42.4</u>	408.66- 388.66
<u>G31R</u>	<u>H-31R</u>	435.36	<u>432.49</u>	<u>2.87</u>	42.2	389.88	22.0-42.0	410.38- 390.38
G32R	<u>H-32R</u>	431.75	<u>429,55</u>	2.20	<u>45</u>	384.55	23.8-43.5	405.75- 386.05
<u>G76L*</u>	<u>G-36</u>	445.29	<u>445.65</u>	<u>-0.36</u>	<u>60</u>	385,34	40-60	405.34- 385.34
G98L (5)	<u>H-18</u>	432.36	<u>430.66</u>	<u>1.70</u>	52.5	<u>378.16</u>	<u>27.5-47.5</u>	<u>403.16-</u> <u>383.16</u>

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IEPA Well No.	BP Well No.	Top of Casing (ft MSL) (1)	Ground Surface Elevation (ft MSL) (1)	Stick Up Length	Well Depth (ft bgs)	Well Depth Elevation (ft MSL)	<u>Well</u> Screen Interval (ft bgs) (2)	Well Screen Interval (ft MSL) (2)
H-31B (3,4)	H-31B	434.27	<u>432.29</u>	<u>1.98</u>	72.8	<u>357.52</u>	<u>NA</u>	<u>NA</u>
		Gra	dient Control Monitorin	g Wells				
G301	RP-1	430.13	427.66	2.47	49	<u>379.05</u>	<u>39-49</u>	389.05- 379.05
G302*	RP-2D	435.34	433.09	2.25	49	383.63	39-49	<u>393.63-</u> 383.63
G303*	RP-3D	435.64	<u>433.30</u>	2.34	44	388.66	34-44	398.66- 388.66
G304 ⁽³⁾	RP-4R	434.55	431.74	2.81	49	382.34	39-49	396.34- 386.34
G305	RP-5	432.19	429.94	2.25	49	380.42	39-49	390.42- 380,42
<u>G306</u>	RP-6	<u>432.80</u>	<u>430.31</u>	2.49	49	<u>381.10</u>	39-49	391.10- 381.10
G307	RP-7D	435.09	432,40	2.69	49	383.42	<u>39-49</u>	<u>393.42-</u> <u>383.42</u>
G005*	B-5D	<u>431.31</u>	<u>429.74</u>	<u>1.57</u>	44	<u>383.85</u>	<u>22-44</u>	<u>405.85-</u> <u>383.85</u>
G006*	<u>B-6</u>	<u>429.08</u>	<u>427.92</u>	<u>1,16</u>	44	<u>384.03</u>	<u>24-44</u>	<u>404.03-</u> <u>384.03</u>
G008*	<u>B-8D</u>	430.04	<u>427.95</u>	2.09	<u>50</u>	378.00	<u>20-50</u>	<u>357.74-</u> <u>377.74</u>
G009	<u>B-9</u>	433,47	431.62	<u>1.85</u>	<u>49</u>	382.59	24-49	407.59- 382.59
G10L	<u>H-20</u>	432,51	<u>430.11</u>	2.40	<u>58.5</u>	<u>374.66</u>	33.5-53.5	<u>399,66-</u> <u>379,66</u>

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IEPA Well No.	BP Well No.	Top of Casing (ft MSL) (1)	Ground Surface Elevation (ft MSL) (1)	Stick Up Length	Well Depth (ft bgs)	Well Depth Elevation (ft MSL)	<u>Well</u> Screen Interval (ft	Well Screen Interval (ft MSL) (2)
G11L	H-21	431.93	429.57	2.36	53.3	376.79	28.3-48.3	<u>401.79-</u> 381.79
G13L	H-23	433.73	431.82	1.91	<u>51.5</u>	381.85	23-43	410.35- 390.35
G14L	<u>H-24</u>	432.12	429.77	2.35	57	372.59	32-52	<u>397.59-</u> 377.59
G16L	H-26A	435.43	433.15	2.28	55	378.31	40-55	<u>393.31-</u> 378.31
G011	C-1	432.84	430.12	2.72	50	379.73	15-50	414.73- 379.73
<u>G017</u>	<u>C-7</u>	434.33	431.56	2.77	<u>49.5</u>	<u>381.31</u>	14.5-49.5	416.31- 381.31
G020	<u>C-10</u>	432.76	430.74	2.02	49.5	380.49	14.5-49.5	<u>415.49-</u> <u>380.49</u>
G021*	C-11	<u>433.71</u>	<u>431.79</u>	<u>1.92</u>	49.5	383.00	14-49	417.61- 382.61
G022	C-12	435.39	432.85	2.54	49	383.85	14-49	418.85- 383.85
G023*	C-13	433.83	431.12	2.71	49.5	380.83	14.5-49.5	415.83- 380.83
G037	C-27	427.62	427.95	-0.33	35	392.50	23.9-34	403.60- 393.50
G042	G-2D	436.86	434.71	2.15	44	390.66	23.03- 43.03	411.63- 391.63
G050 ⁽⁵⁾	G-10	432.67	430.67	2.00	44	386.67	24-44	406.67- 386.67
G059*	<u>G-19</u>	429.03	429.39	-0.36	45	384.30	25-45	404.30-

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IEPA Well No.	BP Well No.	Top of Casing (ft MSL) (1)	Ground Surface Elevation (ft MSL) (1)	Stick Up Length	Well Depth (ft bgs)	Well Depth Elevation (ft MSL)	<u>Well</u> <u>Screen</u> <u>Interval (ft</u> <u>bgs) (2)</u>	Well Screen Interval (ft MSL) (2)
								<u>384.30</u>
G049 (5)	G-9	431.63	429.61	2.02	<u>50</u>	<u>379.61</u>	27-47	<u>402.61-</u> <u>382.6</u>
<u>G056</u>	G-16	425.24	425.53	-0.29	31	394.70	10-30	415.70- 395.70
G057	G-17	426.68	426.96	-0.28	35	391.90	15-3 <u>5</u>	411.90- 391.90
G058	G-18	427.09	427.31	-0.22	36	391.20	16-36	411.20- 391.20
		Gra	dient Control Monitorin		<u>.L</u> .			
G061*	G-21	425.53	426.9	-1.37	40	385.80	20-40	405.80- 385.80
G064	G-24	436.71	436.91	-0,20	55	381.90	29-49	407.90- 387.90
3078*	G-38	425.19	425.51	-0.32	40	385.35	19-39	406.35- 386.35
G079*	G-39	422.84	423.22	-0.38	40	382.97	19-39	403.97- 383.97
G082	G-42	431.13	428.79	2.34	40	388.63	19-39	409.63- 389.63
G083	G-4DR	441.06	437.93	3.13	46	392.06	27.15-46	412.51- 392.51
G116	RL-16	428.09	426.91	1.18	52	374.08	47-52	379.00- 374.08
G19 ^(3,5)	H-29	429.03	429.39	-0.36	55	374.39	25-55	344.39- 374.39

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<u>IEPA Well No.</u>	BP Well No.	Top of Casing (ft MSL) (1)	Ground Surface Elevation (ft MSL) (1)	Stick Up Length	Well Depth (ft bgs)	Well Depth Elevation (ft MSL)	<u>Well</u> Screen Interval (ft bgs) ⁽²⁾	Well Screen Interval (ft MSL) (2)
G33 (3,4)	H-33	<u>433.21</u>	<u>431.19</u>	2.02	41.4	389.79	<u>NA</u>	<u>NA</u>
G34 ^(3,4)	H-34	433.74	431.48	2.26	35.6	393.62	NA	NA
G35* (3,4)	H-35	434.68	431.68	3.00	45.8	382.86	NA	NA
G36R	<u>C-26</u>	426.55	426.95	<u>-0.40</u>	<u>35</u>	<u>391.55</u>	<u>24.1-34.1</u>	402.85- 392.85
G37*	H-37	434.50	432.38	2.12	46	385.95	31-46	400.95- 385.95
G39 (3,4)	<u>H-39</u>	429.78	427.51	2.27	42.6	387.21	NA	<u>NA</u>
G83L	<u>H-3</u>	430.02	<u>427.59</u>	2.43	<u>52.5</u>	<u>374.53</u>	<u>27.5-47.5</u>	399.53- 379.53
G84L	H-4	435.05	433.77	1.28	<u>59</u>	<u>373.96</u>	<u>34-54</u>	398.96- 378.96
G85L	<u>H-5</u>	441.47	440.23	1.24	<u>64</u>	375.89	<u> 26-59</u>	413.89- 380.89
G86L	<u>H-6</u>	442.90	<u>441.03</u>	<u>1.87</u>	64.3	<u>376.04</u>	39.3-59.3	<u>401.04-</u> <u>381.04</u>
<u>G87L</u>	H-7	430.89	<u>429.13</u>	<u>1.76</u>	51.5	<u>376.56</u>	<u> 26.5-46.5</u>	401.56- 381.56
G89L	<u>H-9</u>	<u>433.13</u>	429.93	3.20	<u>53.5</u>	<u>377.79</u>	<u> 28.5-48.5</u>	<u>402.79-</u> <u>382.79</u>
<u>G91* ^(3,4)</u>	<u>M-1D</u>	<u>429.81</u>	<u>427.65</u>	<u>2.16</u>	40.4	389.42	<u>NA</u>	<u>NA</u>
G93* (3,4)	M-3D	<u>428.95</u>	426.85	2.10	41.16	387.79	<u>NA</u>	<u>NA</u>
G91L	<u>H-11</u>	438.66	436.48	2.18	<u>63.5</u>	375.0 <u>5</u>	<u>38.5-58.5</u>	<u>400.05-</u> <u>380.05</u>
<u>G92L</u>	H-12	445.23	<u>443,18</u>	<u>2.05</u>	<u>69</u>	<u>376.71</u>	32-64	413.71-

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<u>IEPA Well No.</u>	BP Well No.	Top of Casing (ft MSL) (1)	Ground Surface Elevation (ft MSL) (1)	Stick Up Length	Well Depth (ft bgs)	Well Depth Elevation (ft MSL)	<u>Well</u> Screen Interval (ft bgs) (2)	Well Screen Interval (ft MSL) (2)
								<u>381.71</u>
<u>G96L</u>	H-16	433.53	431.42	<u>2.11</u>	<u>58.5</u>	<u>373.86</u>	<u>33.5-53.5</u>	<u>398.86-</u> <u>378.86</u>
G97L	H-17	437.75	435.33	2.42	58	372.75	33-53	<u>397.75-</u> 377.75
G99L	H-19	432.34	430.39	1.95	53.5	376.09	28.5-48.5	<u>401.59-</u> 381.59
G103	RL-3	427.66	425.15	2.51	39	386.43	29-39	396.43- 386.43
G104	RL-4	426.29	424.31	1.98	39	385.54	29-39	398.54- 388.54
G105	RL-5	428.55	425.48	3.07	34	388.28	<u>24-34</u>	395.28- 385.28
G106	RL-6	432.78	430.3	2.48	44	386.46	34-44	396.46- 386.46
<u> </u>	11120		adient Control Monitorin		<u> </u>	000.10		
G107	RL-7	429.92	427.41	2.51	39	388.59	29-39	398.59- 388.59
G108	RL-8	430.5	427.85	2.65	39	389.35	29-39	399.35- 389.35
G109	RL-9	429.56	427.57	1.99	39	388.43	29-39	398.43- 388.43
G110	RL-10	427.12	425.12	2.00	34	390.88	24-34	400.88- 390.88
R66L	RL-6BR	434.31	432.09	2.22	55.3	377.19	50-55	382.19- 377.19

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<u>IEPA Well No.</u>	BP Well No.	Top of Casing (ft MSL) (1)	Ground Surface Elevation (ft MSL) (1)	Stick Up Length	Well Depth (ft bgs)	Well Depth Elevation (ft MSL)	<u>Well</u> Screen Interval (ft	Well Screen Interval (ft MSL) (2)
G88L	RL-8B	<u>430.8</u>	<u>427.65</u>	<u>3.15</u>	55	372.54	50-55	<u>377.54-</u> 372.54
		Hydr	ocarbon Recovery Syst	em Wells				
G601	RC-1	432.74	<u>430.14</u>	2.60	56	373.40	<u>36-56</u>	393.40- 373.40
<u>G602</u>	RC-2	432.80	431.20	<u>1.60</u>	<u>55</u>	<u>374.96</u>	<u>35-55</u>	<u>394.96-</u> <u>374.96</u>
G603	RC-3	<u>431.89</u>	<u>431.38</u>	<u>0.51</u>	<u>51</u>	379.39	<u>31-51</u>	<u>399.39-</u> <u>379.39</u>
G604	RC-4	433.51	<u>431.29</u>	<u>2.22</u>	49.5	382.18	<u>25.9-49.5</u>	402.18- 382.18
<u>G605</u>	RC-5	432.36	<u>430.08</u>	<u>2.28</u>	<u>49</u>	<u>381.37</u>	<u>29.1-49.1</u>	401.37- 382.18
<u>G606</u>	<u>RC-6</u>	<u>430.48</u>	<u>429.72</u>	<u>0.76</u>	<u>55</u>	<u>373.27</u>	20-50	<u>408.27-</u> <u>378.27</u>
<u>G607</u>	<u>RC-7</u>	<u>429.42</u>	<u>427.58</u>	<u>1.84</u>	<u>58.5</u>	<u>368.97</u>	<u>24-54</u>	403.97- 373.97
<u>G608</u>	<u>RC-8</u>	433.24	<u>430.55</u>	<u>2.69</u>	<u>61</u>	<u>364.90</u>	<u> 26-56</u>	<u>399.90-</u> <u>369.90</u>
<u>G609</u>	<u>RC-9</u>	438.50	<u>435.51</u>	2.99	<u>64</u>	<u>367.40</u>	<u> 29-59</u>	<u>402.40-</u> <u>372.40</u>
<u>G610</u>	<u>RC-10</u>	<u>445.88</u>	443.06	2,82	<u>69</u>	<u>366.61</u>	<u>33-63</u>	<u>401.61-</u> <u>371.61</u>
<u>G611</u>	RC-11	442.44	440.47	<u>1.97</u>	70	369.96	<u>35-65</u>	404.96- 374.96
G612	RC-12	443.69	442.05	<u>1.64</u>	73	<u>368.21</u>	38-68	448.63- 373.21

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IEPA Well No.	BP Well No.	Top of Casing (ft MSL) (1)	Ground Surface Elevation (ft MSL) (1)	Stick Up Length	Well Depth (ft bgs)	Well Depth Elevation (ft MSL)	<u>Well</u> <u>Screen</u> <u>Interval (ft</u> <u>bgs) (2)</u>	Well Screen Interval (ft MSL) (2)
<u>G613</u>	RC-13	433.27	<u>431.46</u>	<u>1.81</u>	<u>60</u>	<u>371.25</u>	<u>25-55</u>	<u>406.25-</u> <u>376.25</u>
G614	RC-14	433.24	431.70	1.54	59.5	371.60	30-60	<u>406.60-</u> 376.60
G615	RC-15	431.63	430.27	1.36	60	372.15	<u>25-55</u>	407.15- 377.15
G616	RC-16	434.85	432.42	2.43	65	367.61	30-60	402.61- 372.61
G617 ⁽⁵⁾	RC-17	430.22	428.34	1.88	58	370.34	36- <u>53</u>	392.41- 375.41
G618 ⁽⁵⁾	RC-18	431.76	429.35	2.41	57.5	371.85	17.5-52.5	411.76- 376.76
G619 ⁽⁵⁾	RC-19	429.17	427.23	1.94	58	369.23	18-53	408.92- 373.92
G629	RCH-29	437.61	437.38	0.23	59.1	379.79	29.1-59.1	410.39- 379.79
			Cone of Depression W					
G662	PW-62	432.78	430.72	2.06	104.3	326.90	69.3-104.3	361.90- 326.90
G664	PW-64	432.13	430.69	1.44	120.38	310.02	<u>85.38-</u> 120.38	345.02- 310.02
G665	PW-65	433.69	432.27	1.42	122.55	309.35	87.55- 122.55	344.35- 309.35
G666	PW-66	434.14	432.26	1.88	126.1	305.50	91.1-126.1	340.50- 305.50
* Groundwater Manager (1) Top of casing and gro	nent Zone (GMZ) be und surface elevati	oundary wells	are from the 2004 Monitor					

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	<u>IEPA Well No.</u> Survey.	BP Well No.	Top of Casing (ft MSL) (1)	Ground Surface Elevation (ft MSL) (1)	Stick Up Length	Well Depth (ft bgs)	Well Depth Elevation (ft MSL)	<u>Well</u> <u>Screen</u> <u>Interval (ft</u> <u>bgs) (2)</u>	Well Screen Interval (ft MSL) (2)	
ıL	(2)The mdifications were m	ade to the well co	enstruction information	tion based on review of bo	oring logs and v	vell constr	uction details			
	(3) No boring log.									
	Well depth and well depth elevation calculated using measurements collected during 2nd Quarter 2005, and 2004 surveyed ground surface information. respectively.									
	(5) Well depth elevation cal	culated using 200	4 surveyed ground	surface information.						
	NA = Not Available.									

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IEPA	Amoco	Well	Well Depth	- Well Screen							
Well No.	Well No.	Depth (ft.)	Elevation (ft. MSL)	Interval (ft. MSL)							
Compliance Monitoring Wells											
G02S	-G1SR	-8	420.5	-425.3-420.5							
G002	-G01R	-40	390.9	410.5-390.9							
G004*	B 4	59	382.42	402.42 382.42							
G013	_C-3	49.5	380.16	415.16-380.16							
G016 ——	_C 6	49.5	379.85	413.85-378.85							
G045*	G-5	50	392.71	412.71 392.71							
G046	-G-6	_50	391.47	411.47-391.47							
G055*	G 15	_56	388.90	409.90 389.90							
G71L	G-31	_59	386.81	407.11 387.11							
G98L+	 H-18	52.5		27.5-47.5							
G18+	H 28										
G30R	G30R	 42.84	388.21	408.66-388.66							
G31R	G31R	42.22	389.88	410.38-390.38							
G32R+H 32											
G36+*	- Н 36										

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IEPA	Amoco	Well	Well Depth	Well Screen
Well No	Well No.	Depth (ft.)	Elevation (ft. MSL)	Interval (ft. MSL)
		<u> </u>		
Corrective A	Action Monitor	ing Wells		
G062*	G-22	45	388.00 —	-408.00-388.00
G063*	—G-23		382.50 —	402.50-382.50
G065——	G-25	55	389.50 —	-409.50-389.50
G066*	G-26	55	387.40	-407.40-387.40
G067*	G 27	49	386.80	406.80 386.80
G068*	G-28		390.60	-414.60 392.60
G069	G 29	55	391.20	411.20-391.20
<u>G69R</u>				
G072 <u>84</u> *	G-32	45	-387.28	- 407.28 387.28
G073*	—G-33	44	386.72	406.72-386.72
G74L*		60	386.58	406.58-386.58
G75L*	G-35	60	385.65	-405.65-385.65
G76L*	G 36		385.34	405.34 385.34
G77L	G 37	55	387.22	407.22 387.22
Gradient Co				
G601	—RC-1	56	373.40	393.40 373.40
G602	RC-2	<u> </u>	-374.96	-394.96-374.96
G603	RC-3	51	379.39	399.39 379.39
G604	—RC-4	49.5	382.18	-402.18 382.18
G605		- 49	381.37	-401.37-382.18
G606	RC 6	55	373.27	-408.27-378.27
G607	—RC-7——	- 58.5	368.97	-403.97-373.97
G608-		61	- 364.90	- 399.90-369.90
G609		64	367.40	-402.40-372.40
G610 —			366.61	- 401.61-371.61
Gradient Co				
G611		70	-369.96	- 404.96-374.96
	RC 12	73		438.63-373.21
G613	RC-13	60	371.25	406.25 376.25
			371.60	-406.60-376.60
G615	RC-15	58	372.15	407.15 377.15

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G616	RC-16	65	367.61	402.61-372.61
IEPA	Amoco	Well	Well Depth	Well-Screen
Well No.	Well No.	Depth (ft.)	Elevation (ft. MSL)	Interval (ft. MSL)
		-		
G629	RCH-29	- 59.10	379.79	410.39-379.79
G662		104.30	326.90	361.90 326.90
G664	PW-64	120.38	310.02	345.02-310.02
G665	PW-65—	122.55	309.35	344.35 309.35
G666		126.10	305.50	340.50-305.50
Gradient Co	ntrol Monitori	ng Wells		
G0 5S	B 5S	13.5	414.44	- 422.44 417.44
G005*	B-5D	44	383.85	405.85-383.85
G006*		44	384.03	-404.03-384.03
G06S	B-6B	17	410.85	418.85-413.85
G08S	B-8S	14	413.69	- 425.19 418.69
G008*	B-8D	50	378	407.74-377.74
G009	<u>B-9</u>	49	382.59 ———	-407.59-382.59
G417	B-17	51	380.37	- 400.37-380.37
G011	<u>C 1</u>	50	379.73	414.73-379.73
G017		49.5	381.31	-416.31-381.31
G020	C-10	49.5	380.49	-415.4 9-380.49
G021*		49.5	383	-417.61-382.61
G022+	C-12	49		- 14.0-49.0
G023*	-C-13	49.5	380.83	415.83-380.83
G036		35	393.17	- 403.17-393.17
G42S	G-2S	13		- 431.75 421.87
G042	G 2D —	44	390.66	- 411.63 391.63
G083S	 G083S	14	424.06	-434.51-424.51
G083D	G083	46	392.06	412.51 392.51
G047+	G-7	- 47		- 27-37
G048+	G 8	48		28-48
G049+		50		- 27-47
G050+	G-10	44		-24-44
G056	G-16	31	394.70	415.70-395.70
G057	G-17	35	391.90	411.90-391.90
G058	G18	36	391.20	411.20-391.20
G059*	G-19	45	384.30	404.30-384.30
G060*	G 20	40	387.90	408.90 388.90

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IEPA	—Amoco —	Well	Well Depth	- Well Screen
Well No.	<u> Well No.</u>	Depth (ft.)	Elevation (ft. MSL)	Interval (ft. MSL)
CO(1+	G 21	40	205.00	405 00 205 00
G061*		40	385.80	405.80-385.80
G064	G 24	55	381.90	407.90-387.90
G078*	— G-38 ——		385.35	-406.35 386.35
G079*	— G 39 ——		382.97	403.97 383.97
G082	G-42		388.63	409.63-389.63
G83L	- H 3		-374.53	399.53-379.53
G84L	— H 4 ——		- 373.96	398.96-378.96
G85L	— H-5	64	375.89	413.89-393.89
Gradient Co	ontrol Monitori	ng Wells		
G86L	— H-6 ——	64.3	376.04	-401.04-381.04
G87L	— H 7	51.5	-376.56	401.56-381.56
G89L	H 9 —	53.5 ——	- 377.79	402.79-382.79
G91L	H 11	63.5	- 375.05	400.05-380.05
G92L	 H 12	69	- 376.71	413.71-381.71
G96L	H 16	58.5	373.86	398.86-378.86
G97L	H 17	58	372.75	397.75 377.75
G99L	H-19	53.5	376.09	401.59 381.59
G10L	H-20	58.5	374.66	399.66-379.66
GHL	H-21	53.3	376.79	401.79-381.79
G13L-	H 23	51.5	381.85	410.35 390.35
G14I.	H-24	57	372.59	397.59 377.59
G16L	H-26A	55	378.31	393.31 378.31
G19+	H 29	55		<u>-25-55</u>
G33+	11 27	33		25-55
G34+	11 00			
G35+*				
		16	385.95	400 05 285 05
G39+		70	303.73	100,73 303,73
G91+				
G91+*				
G92+*				
G93+*				
G93+				
G101		49	- 372.28	- 382.28-372.28

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IEPA	Amoco	Well	Well Depth	- Well-Screen
Well No.	Well No.	Depth (ft.)	Elevation (ft. MSL)	Interval (ft. MSL)
G103	RL 3		386.43	396.43 386.43
G104	RL-4		386.54	398.54-388.54
G105	RL_5	34	388.28	398.28 388.38
G106	RL-6	44	386.46	396.46 386.46
R66L	RL 6BR	55	377.19	382.29-377.19
G66D	RL-6C	70	361.38	366.38 361.38
G107	RL-7	39	389.59	398.59 388.59
G108		39	389.35	- 399.35-389.35
G88L	RL-8B	55	373.54	377.54 372.54
G88D	RL 8C	70	358.56	362.56-357.56
G109	RL-9	39	388.43	398.43-388.43
G110	—RL 10	34	391.88	400.88 390.88
G301	RP-1	49		389.05 379.05
G32S	RP 2S	14	418.95	428.95 418.95
G302*	RP-2D	49	384.63	393.63-383.63
G33S	RP 3S	14	418.53	428.53 418.53
G303*	RP 3D	44	389.66	398.66 388.66
G37S	RP-7S	14	418.50	428.50 418.50
G307	— RP 7D —	49	383.42	393.42-383.42
G38S	RP 8S	18.5	415	424.73-414.73
G037		34.70	392.50	- 403.6-393.50
G038		34.69	393.70	403.9-393.80
G083		44	391.61	414.61-394.61
G116		52	374.08	379.08 374.08
G411+		NA	-NA	380.7-375.7
R529		47	376.72	386.6 376.72
GMZ-1+		28.64	NA	NA
PANC UPO	3	36.95	373.63	383.63 373.63
PANC UPO	4	35	370.04	380.04-370.04
PANC UPO	6	17	390.52	<u> 400.52-390.52</u>
PANC-UPO	8	23	387.96	- 397.96-387.96
LOD-1		34.24	392.21	405.41-395.41
LOD 2		41.6	380.8	392.23-382.23
LOD-3		42.28	380.71	393.02-383.02
LOD 6		30.09	392.77	404.73-394.63
LOD-7		29.95	392.1	405.22-395.12

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LOD-9+ 30.37 394.7 NA

+ = Well construction information is incomplete

* = GMZ boundary wells

Within thirty (30) days of the date of installation/modification of groundwater monitoring wells G042S, G083S, and G083D is completed, the Permittee must submit the following information:

- 1. Well Depth (ft.)
- 2. Well Depth Elevation (ft. MSL)
- 3. Well Screen Interval (ft. MSL)
 - 2. Construction of each monitor well/piezometer must be in accordance with the diagram contained in Attachment 1 to this Permit or details and diagrams approved by the Agency's DLPC. All new monitor wells/piezometers to be installed must be continuously sampled and logged on Agency boring logs as-(example in Attachment <u>D2A</u>) unless otherwise approved by the Agency. Construction details are to be recorded on an Agency acceptable form as provided in Attachment-4<u>DA</u>.
 - 3. The Permittee shall notify the Agency within 30 days in writing if any of the wells identified in Condition—IVIII.C.1 are damaged or the structural integrity has been compromised. A proposal for the replacement of the subject well shall accompany this notification.
 - 4. Should any well become consistently dry or unserviceable, a replacement well shall be provided within ten (10) feet of the existing well. This well shall monitor the same zone as the existing well and be constructed in accordance with the current Illinois EPA groundwater monitor well construction standards at the time that the wells are replaced. A replacement well which is more than ten (10) feet from the existing well or which does not monitor the same geologic zone must be approved by the Agency and designated as a new well.
 - 5. The Permittee shall submit boring logs, construction diagrams and data sheets from installation and development of a new or replacement well to the Agency at the address below within thirty (30) days of the date that installation of the well is completed. In addition, the Permittee shall submit certification that plugging and abandonment of a well was carried out in accordance with the approved procedures to the Agency at the address below within thirty (30) days of the date

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that the well is plugged and abandoned. All pertinent information should be submitted to the appropriate State agencies.

Illinois Environmental Protection Agency Groundwater Assistant Unit Division of Land Pollution Control -- #33 Post Office Box 19276 Springfield, Illinois 62794-9276

6. All wells/piezometers shall be equipped with protective caps and locks.

Monitoring wells or piezometers located in high traffic areas must be protected with bumper guards.

D. GROUNDWATER PROTECTION STANDARD

1. The Permittee shall sample the Groundwater Quality Sampling Wells listed in Condition III.C.1 for the constituents listed below. The Permittee shall sample the Group A wells listed in Condition III.C.1 during an initial sampling event, and sample Group B wells listed in Condition III.C.1 not more than three years later. The Permittee shall sample the Group A and Group B wells on an alternating three-year basis. Compliance Monitoring Wells and Detection Monitoring Wells* listed in Condition C.1 above for the following constituents on a quarterly basis and the Corrective Action Monitoring Wells and Gradient Control Wells + listed in Condition C.1 above on a semi-annual basis:

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<u>Parameter</u>	Storet Number (Total)
Metals	- 01000
Arsenic	01002
Barium Barium	<u>01007</u>
Beryllium	<u>01012</u>
Cadmium	<u>01027</u>
Chromium	<u>01034</u>
Lead	<u>01051</u>
Nickel	<u>01067</u>
<u>Selenium</u>	<u>01147</u>
<u>Vanadium</u>	<u>01087</u>
VOCs	_
Benzene	<u>34030</u>
<u>Toluene</u>	<u>34010</u>
Ethylbenzene	<u>78113</u>
<u>Xylenes</u>	34020
Methyl Tertiary-Butyl	
Ether (MTBE)	<u>NA</u>
SVOCs	-
Benzo(a)anthracene	34526
Benzo(a)pyrene	34320 34247
Benzo(b)fluoranthene	34247
Benzo(k)fluoranthene	24242
Chrysene	34320
Dibenzo(a,h)anthracene	
	<u>34556</u>
<u>Naphthalene</u>	<u>34696</u>

Hazardous Constituents	STORET No(Total)	Concentration Limits (mg/l)
Metals		
Arsenic		.05
- Barium	01007	2.0

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Beryllium	01012	0.004
Cadmium	01027	0.005
Chromium	01034	0.1
Cobalt	01037	1.0
	01045	5.0
Lead+	01051	0.0075
— Manganese*+	01055	0.15
Mercury —	71900	0.002
Nickel Nickel	01067	0.1
Selenium	01147	0.05
Vanadium	01087	-0.049
VOCs		
Benzene+	34030	0.005
Ethylbenzene	78113	0.7
Toluene	34010	1.0
Total Xylenes	34020	10.0

- * = Iron and Manganese will only be sampled from the following groundwater monitoring wells: G063, G065, G072, G073, G69R, G75L, G76L, G77L, G013, G016, G32, G36, G71L, G98L, G045, G18, G30, G301, G42S, and; Manganese only: G31, G74L and G004
- += The following wells will only be sampled for benzene, iron, lead, and manganese: G008
- 2. If the concentration limits of any constituent listed in Condition D.1 above are exceeded in any of the Compliance Monitoring or Corrective Monitoring Wells, the well(s) in question shall be sampled the subsequent quarter for the constituents listed below. Any constituent listed below detected in groundwater shall be added to the routine sampling list in Condition D.1 above.

	<u>Metals</u>
	Antimony
	Arsenic
***************************************	- Barium
	— Beryllium
	— Cadmium
	Chromiun

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Cobalt Lead Mercury **Nickel** Selenium Vanadium **Volatiles** Benzene Carbon disulfide Chlorobenzene Chloroform 1,2-Dichloroethane Ethylbenzene Methyl ethyl ketone Styrene **Toluene** Xylene(m, o, and p)

Semi-Volatile Base/Neutral Extractable Compounds

Anthracene

Benzo(a)anthracene

Benzo(b)fluoranthene

Benzo(k)fluoranthene

Benzo(a)pyrene

Bis(2 etiylhexyl)phthalate

Butyl benzyl phthalate

Chrysene

Dibenz (a,h) anthracene

Di(n)butyl phthalate

Dichlorobenzenes

Diethyl phthalate

Dimethyl phthalate

Di(n)octyl phthalate

Fluoranthene

Naphthalene

Phenanthrene

Pyrene

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Pyridine

Semi-Volatile Acid Extractable Compounds

Cresols (o and p)

2,4 Dimethylphenol

2,4-Dinitrophenol

4 Nitrophenol

Phenol

E. GROUNDWATER MONITORING PROGRAM

- 1. In accordance with 35 Ill. Adm. Code 620.250, a GMZ is a three dimensional region containing groundwater being managed to mitigate impairment caused by the release of contaminants from the facility. The following thirty-four (34) groundwater monitoring wells shall define the outermost horizontal and vertical extent of the approved GMZ:
 - a. GMZ boundary wells listed by location:
 - Northern Boundary: G072G084, G073, G063, G062, G067, G068, G69R, G76L, G75L, and G74L;
 - Eastern Boundary: G055, G045, G-5B, G0066, G004, G36, G35, G005, G91, G92, G93, G006, and G008;
 - Southern Boundary: G37, SWMU12-MW02, and G302; and
 - Western Boundary: G303, G023, G021, G078, G079, G059, G060, and G061.
 - b. Vertical boundaries of the GMZ shall range from the approximate top of the uppermost aquifer (30 feet bgs) to the top of the bedrock surface at the Amoco Main Plant propertyfacility.
- 2. The interim corrective action program shall control the horizontal and vertical flow in the vertical column of water present in the uppermost aquifer beneath the <u>Main PlantRiverfront Propertyfacility</u> and monitor the position and rate of migration of the hydrocarbon pool as follows:

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- a. The Gradient Control Wells (Cone of Depression (COD) wells) listed in Condition <u>IVIII.</u>C.1 and located on <u>Figure 3</u> are hereby incorporated by permit into the interim corrective action program.
- b. The pumping rate from each Gradient Control Well COD well shall be recorded daily. This data shall be used to calculate the monthly average withdrawal rate for the Gradient Control COD System.
- 3. The Permittee shall monitor the groundwater horizontal and vertical gradients in the uppermost aquifer beneath the Riverfront Property facility.
- 4. The Permittee shall record the following measurements and submit to the Agency by March 31st of the year following the annual monitoring period semi-annually as required by Condition **EVIII.G.2**.
 - a. A record of the amount of groundwater withdrawn each day by the groundwater withdrawalCOD wells.
 - b. Quarterly monitoring of the piezometric head at wells in the uppermost aquifer identified in Condition C.1 above to demonstrate that groundwater flow is properly controlled throughout the contaminated area requiring corrective action in the uppermost aquifer.
 - c. The amount of hydrocarbon recovered from each recovery well and the entire recovery system.
 - d. The measured thickness of hydrocarbon product encountered at each well identified in Condition <u>IVIII.C.1</u>.
- 5. The Permittee shall determine the groundwater flow rate and direction in the uppermost aquifer at least annually from the monitoring wells listed in Condition IVIII.C.1.
- 6. The Permittee shall submit an application for permit modification if a demonstration cannot be made that the groundwater flow in the uppermost aquifer is being controlled as required by Condition—IV.E.2III.E.4.b. This application must contain a revised corrective action program meeting the requirements of 35

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IAC 724.200 which provides for removal or treatment of contaminated groundwater beneath the Riverfront Main Plant Property facility and be submitted within ninety (90) days of the date that the demonstration required by Condition IV.E.3-III.E.4.b was attempted.

- 7. Prior to making any changes on-site which might affect reduce the overall program associated with controlling the groundwater flow as required by Condition IVIII.E.2 of the permit (i.e., maintain and verify an inward gradient), the Permittee must obtain written permission from the Agency. Detailed information regarding the changes shall be submitted to the Agency at least 120 days prior to the date that the change is to be made. Disapproval or approval with modifications of any written requests for changes shall be subject to the appeal provisions of Section 40 of the Illinois Environmental Protection Act.
- 8. The Permittee shall maintain all equipment associated with withdrawal and treatment of water withdrawn from the uppermost aquifer to adequately control groundwater flow. This includes maintenance of any pollution control equipment (i.e., air pollution and water pollution control equipment) necessary for these activities.
- 9. If the groundwater gradient is not maintained, as required by Condition III.E.2., or a significant increase in contamination is detected in the Corrective Action Monitoring wells, the Permittee shall submit an application for a permit modification.
- 10. The Compliance Monitoring Wells listed in Condition IIV.C.1 shall be monitored for the constituents listed in Condition IIV.D.1. The Groundwater Quality

 Sampling wells listed in Condition III.C.1 shall be monitored for constituents and frequency listed in Condition III.D.1.
- 11. If the Permittee determines that the interim corrective action is not effective in managing the impact to groundwater, the Permittee shall submit an application for a permit modification within ninety (90) days to make any appropriate changes to the program.
- 12. The Permittee shall determine the groundwater surface elevation referenced to mean sea level (MSL) at each well each time groundwater is sampled in accordance with Condition-IV.DIII.D.1.

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- 13. The Permittee shall report the surveyed elevation of stick-up and ground surface referenced to MSL when the well is installed (with as-built diagrams) and every two years, or whenever the elevation changes.
- 14. Elevation, as referenced to MSL, of the bottom of each monitoring well (STORET 72020), is to be <u>eollected-measured and</u> reported at least-annually. The mandatory measurement shall be taken during the months of April or May and reported by <u>July 15 by March 31st of the year following the monitoring period</u>.

F. SAMPLING AND ANALYSIS PROCEDURES

The Permittee shall follow the techniques and procedures described in Volume 26, Exhibit 13-4Section 3 of the Approved Permit Application and as modified by this permit when obtaining and analyzing samples from the groundwater monitoring wells described in Condition IV. III. C.1:

- 1. Samples shall be collected by the techniques described in Section 5.0 of Volume 6, Exhibit 13-4Section 3.5 of Volume 2 of the Approved Permit Application.
- 2. Samples shall be preserved, shipped and handled in accordance with the procedures specified in Section 6.03.5 and Section 3.9, respectively, of Volume 26, Exhibit 13-4 of the Approved Permit Application.
- 3. Samples shall be analyzed according to EPA approved procedures.
- 4. Samples shall be tracked and controlled using the chain of custody procedures specified in Section 7.0-3.10.2 of Volume 62, Exhibit 13-4 of the Approved Permit Application.

G. <u>REPORTING AND RECORDKEEPING</u>

- 1. The Permittee shall enter all monitoring, testing and analytical data obtained in accordance with Conditions-<u>IVIII</u>.D and <u>IVIII</u>.E into the operating record.
- 2. <u>Results of Ssamples collected to meet the requirements of Condition-IVIII.D.1</u> shall be collected during the second and fourth quarters of each calendar yearevery

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three years, and submitted to the Agency as identified in the table belowon March 31st of the year following the annual monitoring period.

3. Groundwater surface elevation data, measured pursuant to Condition-IVIII.E.142, shall be collected at least quarterly and submitted to the Agency on March 31st of the year following the annual monitoring period.

as identified in the table below

- 4. Groundwater withdrawal rates, calculated pursuant to Condition IVIII.E.2.b shall be submitted on March 31st of the year following the annual monitoring period. quarterly as identified in the table below.
- 5. Gradient control measurements collected pursuant to Condition IVIII.E.4 shall be submitted to the Agency on March 31st of the year following the annual monitoring period.

as part of the second and fourth quarter reports as identified in the table below.

6. The groundwater flow rate and direction, determined pursuant to Condition IV-III.E.5, shall be submitted on March 31st of the year following the annual monitoring period.

as a part of the second quarter report as identified in the table below.

7. All additional data collected for the groundwater monitoring program (as specified in Conditions_IVIII.E and_IVIII.F) shall be submitted to the Agency in on March 31st of the year following the annual monitoring period.

accordance with the schedule identified in the table below.

_Results Submitted		
of Calendar —	Collected E	Ouring
to-the	Agency by	
Year	the Months of	the Following
Analytical	Triennial	March 31 st of the following yea
-Groundwater Hydrau	lics Annual	March 31 st of the following year
First Quarter	January February	July 15
Second Ouarter	April May	————— <u>Inlv 15</u>

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Third Quarter	July August —	January 15
Tillia Qualici	July Mugust	January 13
Fourth Quarter	October November	January 15
Tourist Quarter	OCTOBEL TIO CHIECE	January 13

- 8. The Permittee shall develop a brief report evaluating each set of monitoring results collected in accordance with Conditions IVIII.D, IVIII.E and IVIII.F and place it in the operating record for the facility. This report must evaluate each set of results and determine whether or not the groundwater flow in the uppermost aquifer is being adequately controlled to contain any contaminant plume originating from the Main PlantRiverfront Propertyfacility as required by Condition IVIII.E.32. The information collected in accordance with Condition II.E.15 should also be utilized in developing this report. If data indicates that groundwater flow is not being adequately controlled, the Permittee shall:
 - a. Notify the Agency in writing within seven (7) days of the date that this determination is made;
 - b. Take actions as necessary to regain the control of groundwater flow as required by Condition <u>IVIII</u>.E.<u>2</u>3.
 - c. Submit a written report to the Agency within thirty (30) days describing the actions taken to regain control of groundwater flow. In addition, the report must contain information which demonstrates that groundwater flow is being adequately controlled.
 - d. Submit a request for permit modification to the Agency within sixty (60) days describing any changes, which must be made to the corrective action program to ensure that the groundwater flow is adequately controlled.
- 9. The Permittee shall submit a written report to the Agency semiannually which discusses the effectiveness of the interim corrective action program. The report must address at a minimum: (1) the ability of the program to control groundwater flow as required by Condition IV-III.E.2, and (2) the describe any improvement in the quality of groundwater beneath the facility which has resulted from the interim corrective action program, if samples are collected during the monitoring period. This report must be submitted by July 15 (for the first and second quarter sampling events) and January 15 of the following year (for the third and fourth quarter sampling events) March 31st of the year following the annual monitoring period.

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10. The Permittee shall report all information to the Agency in a form, which can be easily reviewed. All submittals must contain tables of data, drawings and text (as necessary) to accurately describe the information contained in the submittal.

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SECTION <u>VIIV</u> REPORTING AND NOTIFICATION REQUIREMENTS

The reporting and notification requirements of each section of the RCRA permit are summarized below. This summary is provided to <u>highlight</u> the various reporting and notification requirements of this permit.

Condition	Submittal	Due Date
SECTION I:	POST-CLOSURE	
E.2	Record of the type, location, and quantity of hazardous waste disposed within each cell or disposal unit.	Within 60 days after certification of closure.
E.3.a	Record notation on the deed to the facility property regarding hazard ous waste management at the site.	
E.3.b	Certify to Agency that the notation required in E.3.a has been recorded.	Within 60 days after certification of closure.
E.4	Request permit modification to remove the liner or hazardous wastes.	Prior to removing the liner or wastes.
E.5	Certify to the Agency that post————————————————————————————————————	Within 60 days after completion of the post closure care period.
SECTION H	II: STANDARD CONDITIONS	
6	Complete application for new permit.	At least 180 days prior to permit expiration.
11	Information requested by Agency and copies of records required to be kept by this permit.	Reasonable time.

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14	Notify Agency of planned physical alterations or additions.	At least 15 days prior to planned change.
15	Notify Agency of changes which may result in permit noncompliance.	
16	Application for permit modification indicating permit is to be transferred.	
18	Submission of any information required in a compliance schedule.	Within 14 days after each schedule date.
19	Report to Agency any non-compliance which may endanger health or environment	•
	Telephone	Within 24 hours after discovery.
	in writing	Within 5 days after discovery.
20	Report all other instances of noncompliance.	March 1 of each year along with Annual Report.
28	Notify Agency in writing of expected receipt of hazardous waste from foreign source.	At least 4 weeks prior to receipt of waste.
41	Implementation of Contingency Plan. Notify appropriate state and local agencies with designated response roles.	As needed.
	Notify appropriate local officials.	Immediately, if emergency coordinator's assessment indicates evacuation of local area is advisable.
	Notify the Agency (217/782-3637) or Illinois ESDA (217/782-7860) if emergency coordinator determines	—Immediately after determination —made.

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	there has been a release, fire or explosion which could threaten human health or the environment, outside the facility.	
	Notify Agency and appropriate state and local authorities, in writing that facility is in compliance with. 35 IAC 724.156(h).	— Prior to resuming operation in affected areas.
	Report to Agency details regarding incident which required implementation of contingency plan.	—Within 15 days after event.
47 <u>29</u>	Submit annual report required by 35 IAC 724.175.	March 1 of each year.
49	—Application for permit modification —amending closure plan.	
50	Notify Agency that expecting to close.	At least 180 days prior to beginning closure.
54(a) and 60(a)	Adjust closure or post closure cost estimate for inflation.	Within 60 days after anniversary date.
54(b) and 60(b)	Revision of closure or post closure cost estimate.	As needed.
55 and 61	— Change in financial assurance — mechanism for closure or post closure.	
56 and 62	— Change in coverage for sudden and non-sudden accidental occurrences.	
57 and 63	Notify Agency of commencement of voluntary or involuntary bankruptcy proceedings.	Within 10 days after commencement of proceeding.

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SECTION VIII INVESTIGATION AND REMEDIATION OF PRODUCT RELEASE SITES

A. <u>Introduction</u>

In accordance with this section, the Permittee shall investigate and/or remediate the PRSsroduct Release Sites identified in Condition VII.B.1 as necessary to protect human health and the environment. This shall be has been accomplished in part by:

- 1. Conducting a Product Release Site Investigation (PRSI) to determine whether releases of contaminants have occurred from any PRS at this facility, and if so, the nature and extent of such release(s). BP submitted a Product Release Site Corrective Action Workplan in March 1994 that described the necessary remedial actions to be taken. Illinois EPA approved the Corrective Action Workplan in September 1994.
- 2. BP conducted remediation of surficial sources of impact in accordance with the approved Corrective Action Workplan from July through October 1994 at PRSs 1, 2, and 6. No Further Action status has been achieved through the land reuse process for PRS 1 and parts of PRSs 5 and 6. Work Plans have been approved for land reuse areas that contain all or parts of PRSs 2, 3, 5, 6, and 8. PRS 4 (the hydrocarbon pool) is being remediated through use of the cone of depression (COD) wells and the hydrocarbon recovery system (HRS). Based upon the results of the PRSI, developing and implementing a Remedial Action Plan that describes the necessary remedial actions that will be taken. The required remedial actions will be those actions necessary to protect human health and the environment from all releases of contamination from any of the PRSs determined to pose an environmental threat by the PRSI required under the terms and conditions of this permit.
- 3. Implementing remedial measures at any time to remove surficial sources of contamination from any unit included in this section provided that the Agency is given prior written notification.

B. <u>Conducting the Product Release Site Investigation</u>

1. Product Release Sites (PRS) PRSs must continue to be investigated and/or remediated as described in this section. The following unit(s) is(are) to be

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investigated, and remediated if necessary, by the Permittee in accordance with the requirements of this section:

	PRS Status of Corrective Action - Main Plant				
PR	<u>s</u>	Land Reuse	Description	Media of	Status of Corrective Action
		<u>Area</u>		<u>Concern</u>	
PR\$	1 [<u>2</u>	Former Tank 228 Dike	<u>Soil</u>	NFA for soils for Area 2.
			Area		
PR\$	2	<u>&</u>	Former Tank 246 Dike	<u>Soil</u>	Soil Product Release Site Investigation
			Area		(PRSI) required. Area 8 Work Plan
					approved.
PRS	3	<u>5</u>	Waste Oil Leak Area	<u>Soil</u>	Soil PRSI required. Area 5 Work Plan
					approved.
PR\$	4	Parts of $2, 3, 6$	Hydrocarbons on Water	<u>Groundwater</u>	Continuous hydraulie control/product
		7, 8, and 10	<u>Table</u>		recovery at the BP Main Plant
PR\$	5	1, 7, 8, and a	North Tank Farm	<u>Soil</u>	Soil PRSI required. NFA for soils for
		part of 2			Areas 1 and 2. Areas 7 and 8 Work
					Plan approved.
PR\$	6	Parts of 2, 10	East Tank Farm	<u>Soil</u>	Phytoremediation.
					Area 10 Work Plan Approved. NFA for
		<u>.</u>			soils for Area 2.
PRS		12	South Tank Farm	<u>Soil</u>	Area 12 Work Plan to be developed.
PRS	8	<u>9</u>	Korea Tank Farm	<u>Soil</u>	Soil PRSI required. Area 9 Work Plan
		<u></u>			approved.
PR\$	9	<u> </u>	Gasoline Piping Manifold	<u>Soil</u>	Soil PRSI required.

Notes:

<u>—PRS 9 is</u>	due to a release from a ga	asoline piping manifold. The l	ocation of PRS 9 is unknown
<u>PRS #</u>	Unit Name	Former Designation from RFA	Environmental Media of Concern
1	Former Tank 228	SWMU No. 10	——Soil
	— Dike Area Former Tank 246	SWMII No. 11	Soil

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3	———Dike Area ——Waste Oil Leak	SWMU No. 28	Soil
4	Hydrocarbons on Water Table	SWMU No. 37	Groundwater
5	North Tank Farm	AOC 1	———Soil
6	East Tank Farm	AOC 2	Soil
7	South Tank Farm	AOC 3	Soil
8	Korea Tank Farm	AOC 4	Soil
9	Gasoline Piping		——Soil

- 2. The Permittee shall notify the Agency in writing of any newly identified units discovered during the course of groundwater monitoring, field investigations, environmental audits, or other means, no later than sixty (60) calendar days after discovery. This notification must comply with Section III-IV.F of this permit. At the Agency's discretion, the unit may be incorporated into this section or into Section III-IV of this permit.
- 3. The Permittee submitted a Phase I RFI report to the Agency's DLPC Permit
 Section in December 1995. The Phase I RFI addressed the status of the nine (9) PRSs
 and remedial actions completed to that point. The Phase I RFI report was approved
 by the Agency on June 5, 2001.

Within 120 days of the effective date of this permit, the Permittee must submit to the Agency a PRSI Workplan to determine the nature and extent of contamination associated with the unit(s) listed in Condition VII.B.1. The PRSI workplan must contain information similar to that required in Section V and Attachment C for RFI workplans. For investigative purposes, the Permittee may use any screening methods specifically approved by the Agency in writing. Samples taken to demonstrate that no further action is necessary at a specific unit must be taken and analyzed in accordance with the latest edition of Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (USEPA SW 846) or another laboratory analytical method specifically approved by the Agency in writing.

3. The Permittee submitted a Phase II/III Conceptual Project Plan to Illinois EPA in November 1997. In March 2001, a RFI Phase II/III Project Plan that superseded the 1997 document was submitted to Illinois EPA. This Plan summarized a process whereby SWMUs, PRSs, and all other recognized environmental conditions present within a given land reuse parcel would be investigated and remediated. This process is described in detail in Section III of this permit.

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- 4. Illinois EPA approved the March 2001 RFI Phase II/III Project Plan in February 2002. Updates to the Project Plan schedule must be submitted regularly for reapproval by the Agency. The approved updates become part of the Corrective Action program for the facility. The Agency will review the PRSI Workplan and approve, approve with modifications, or disapprove the Workplan in writing and provide comments regarding the necessary corrections or modifications.
 - a. Within 60 days of receipt of such comments, the permittee must-modify the plan or submit a new plan for the Agency's approval.
 - b. Within 30 days of the Agency's approval of the PRSI workplan, the Permittee shall begin implementing the workplan according to the terms of the schedule in the workplan.
 - c. Agency action on the PRSI Workplan will be subject to the appeal provisions of Section 39(a) and 40(a) of the Illinois Environmental Protection Act.
- 5. Amoco shall submit a reports detailing the results of the PRSIs to the Agency by the dates specified in the approved PRSI Workplan Project Plan update schedule. Thiese reports shall describe the nature and extent of contamination associated with each unit and identify those units that require remediation to ensure protection of human health and the environment.
- 6. The Agency will review the report(s) identified in VII.B.5 above and approve, approve with modifications, or disapprove any determinations made as to the necessity of further remediation at each PRS.
 - a. If the Agency feels that the a report is unacceptable, then the report will be disapproved. A letter identifying the deficiencies in the report will be sent to the Permittee. Within 60 days of receipt of the disapproval letter the permittee must submit a revised report which addresses the Agency noted deficiencies for the Agency's approval.
 - b. Within 90 days of the Agency's approval of the determinations contained in the report, the Permittee shall submit a Remedial Action Plan in accordance with Condition VII.C.1.

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c. Agency action on the proposals contained in the report will be subject to the appeal provisions of Section 39(a) and 40(a) of the Illinois Environmental Protection Act.

C. Remedial Action Plan

- 1. A Remedial Action Plan must be incorporated into all submittalsed to the Agency that (1) describes the activities to be conducted at those units requiring remedial action as identified in accordance with Conditions VII.B.5 and 6, and (2) contains a schedule for conducting those activities. The goal of any Remedial Action Plan shall be to remediate detected contamination, as necessary, to protect human health and the environment. This plan shall be developed in general accordance with Condition IV.D of this Permit.
- The Agency will review the Remedial Action Plan and approve, approve with modifications, or disapprove the plan in writing and provide comments regarding the necessary corrections or modifications.
 - a. Within 60 days of receipt of disapproval comments, the permittee must modify the Remedial Action Plan or submit a new plan for the Agency's approval.
 - b. Within 30 days of the Agency's approval of the Remedial Action Plan, the Permittee shall begin implementing the plan according to the terms of the schedule contained in the plan.
 - c. Agency action on the proposals contained in the Remedial Action Plan will be subject to the appeal provisions of Section 39(a) and 40(a) of the Illinois Environmental Protection Act.
- 3. Upon completion of the Remedial Action Plan, the Permittee shall submit a report to the Agency that details the results of the Remedial Actions performed and propose further actions if necessary. The Agency will review any proposals for further actions or for no further actions at specific units in accordance with Condition VII.C.2.

D. Remedial-Measures

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- 1. The Permittee may implement Remedial Measures at any time to remove surficial sources of contamination from any unit included in this section. Remedial Measures include removal of any obvious contamination, or other immediate measures to alleviate obvious contamination prior to investigative sampling at a unit. All such remedial measures and treatment/disposal of resultant waste must be conducted in accordance with all applicable federal, state and local laws, regulations and ordinances.
 - a. The Agency must be notified in writing any time the Permittee plans to implement remedial measures.
 - b. Workplans must be developed describing the activities that will be carried out during the remedial measure.
 - c. A copy of the workplan mentioned in Condition VII.D.1.b must be submitted to the Agency for review and approval prior to implementation of the remedial measure.
 - d. A report documenting the results of each remedial measure must be submitted to the Agency within sixty (60) days after it is completed.

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ATTACHMENT A

Certification Documentation for Construction

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ATTACHMENT A

CERTIFICATION DOCUMENTATION FOR CONSTRUCTION

When submitting certifications required by this Part B Permit for construction relating to any unit, please complete the attached certification form. This will help to ensure that the submittal reaches its proper designation and the certification will meet the regulatory requirements. Sending the Field Operations Section (F.O.S.) copy directly to the Field Office is acceptable as long as all copies have a completed copy of the enclosed form attached and you advise the Permit Section, in writing that a copy has been sent to F.O.S.

A documentation report and as-built drawings (sealed and signed by an Illinois Professional Engineer) must be included with this certification. Information necessary to document the construction of the unit and to support the certification must be contained within the report. This report should include a thorough description of all construction data and drawings should be formatted in a logical and orderly manner. The construction documentation report must contain at least the following items:

An introduction and summary which describes the scope and purpose of the project;
 A description of all construction activities, including quality assurance and quality control;
 As built drawings of the unit and a description of any deviations from the plans and specifications approved in the permit;
 A description of the test methods used and justification for any deviations from standard test methods;
 A summary of test results, identification of any samples which did not meet the specifications and the corrective action and retesting which was undertaken in response to any failing test results;
 Any necessary information associated with construction of the unit to document that construction was in accordance with the plans and specifications approved by this permit;
 Information specifically required by the permit; and

8. Any available photographs of the unit.

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CERTIFICATION

This statement is to be completed by both the engineer upon completion of construction in one copy of the certification with original signification statements and any information	accordance with 35 IAC Section 702.126 gnatures and two additional copies. Forw	Submit ard these
Illinois Environmental Protection Ag Bureau of Land #33 Permit Section 1021 North Grand Avenue East Post Office Box 19276 Springfield, Illinois 62794 9276	gency	
FACILITY NAME: Amoco Oil Company	Riverfront Facility, Wood River, Illinois	
IEPA SITE CODE: LPC #1191155009000	<u>‡</u>	
U.S. EPA ID NO.: ILD980503106700967		
PART B PERMIT LOG NO.: 1457		
PERMIT (OR MODIFICATION) ISSUANCE	CE DATE:	
PERMIT CONDITION NO. REQUIRING	CERTIFICATION:	
Thehas b in the Part B Permit. Documentation that the contained in the enclosed report. I certify us attachments were prepared under my directive designed to assure that qualified personnel psubmitted. Based on my inquiry of the personsector of my knowledge and belief, true, accursignificant penalties for submitting false informations.	e construction was in accordance with the nder penalty of law that this document and on or supervision in accordance with a symporoperly gather and evaluate the information or persons who manage the system, or e information, the information submitted rate, and complete. I am aware that there	permit is al all stem on those is, to the are
Signature of Owner/Operator	Name and Title	
Signature of Registered P.E.	Name of Registered P.E. and Illinois Registered Number	
Date	P.E. Seal	

ATTACHMENT

Required Scope of Work for a RCRA Facility Investigation

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ATTACHMENT B

REQUIRED SCOPE OF WORK FOR A RCRA FACILITY INVESTIGATION Amoco Oil CompanyPs Wood River, Illinois Riverfront Facility ILD980700967 LPC #1191150001 Part B Log #147

This Scope of Work relates specifically to the RCRA Facility Investigation (RFI) of the solid waste management units identified in Section IIIV of this RCRA Permit, which the Permittee is required to perform under the terms of this RCRA permit. In this Scope of Work, "Agency's DLPC" refers to the Illinois Environmental Protection Agency's Division of Land Pollution Control, "Permittee" refers to Amoco Oil Company Riverfront Facility and "SWMU" refers to Solid Waste Management Unit.

I. <u>PURPOSE</u>

The purpose of the RFI is to determine the nature and extent of releases of hazardous waste or hazardous constituents, if any, from SWMUs located at the facility and to gather data necessary to prepare a Corrective Action Plan (CAP). Specifically, the information gathered during the RFI will be used to help determine the need, scope and design of a corrective action program.

II. SCOPE OF WORK

The Scope of Work for the RFI is divided into three phases - Phases I, II and III.

- 1. The purpose of Phase I is to provide information on the characteristics and integrity of each unit and conduct field activities, as necessary, to determine if a SWMU has released, is currently releasing, or has the potential to release hazardous waste and/or hazardous constituents to the environmental media of concern for each SWMU listed in Section IIIV, Condition B.1 of this permit.
- 2. Phase II of the RFI will be required if the Agency's DLPC determines from the data obtained in Phase I that, for any SWMU: (1) a release has occurred to an environmental media of concern for that unit, (2) a release is occurring to an environmental media of concern for that unit, or (3) the results of the Phase I investigation are inconclusive. The purpose of the Phase II investigation is to

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define the extent of releases to the environmental media of concern from these SWMUs.

3. Phase III of the RFI will be required if the Agency's DLPC determines from the data obtained from Phase II investigations that hazardous wastes or hazardous constituents have migrated to the groundwater from SWMU(s) not initially thought to have potentially released hazardous waste or hazardous constituents to groundwater. The purpose of Phase III is to define the extent of releases both on site and off-site to the groundwater from SWMUs identified in Phase I or Phase II to have potentially released hazardous waste or hazardous constituents to the groundwater.

Each phase of the investigation is divided into three subparts. The first subpart deals with the development of a RFI Workplan by the Permittee. The second subpart is the implementation of the RFI. The final subpart covers the submission of reports of activities and results of the RFI.

III. RFI WORKPLANS

The Permittee shall prepare a detailed workplan for each phase of the RFI which contains detailed background information related to the facility and the SWMUs listed in Condition B.1 of Section IIIV of the permit and which describes procedures for each phase of the RFI in accordance with the schedule in Section IIIV of the permit. Condition IIIV.B.1 of the permit also identifies the environmental media of concern for each SWMU which must be investigated and provides additional guidance regarding what the focus of the RFI should be for some of the SWMUs of concern. The RFI Workplan must, at a minimum, contain the information identified in III.A III.H below. The information in the workplan must be presented in a manner which is similar to the format set forth in these sections. (If it is desired to develop a workplan using some other format, then a checklist must be developed identifying the exact location where each item below is addressed (page number and paragraph)). Information provided in each Phase of the RFI may be incorporated into the workplan for the subsequent Phase by reference. Information already submitted in the Part B permit application may also be incorporated by reference into the workplans when appropriate (any such reference must identify the page on which the information in question is located).

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A. GENERAL FACILITY INFORMATION

The following information must be provided (to the extent known) in the Phase I RFI Workplan regarding the facility overall:

- 1. A description of the facility, including the nature of its business, both past and present. This description should identify (1) the size and location of the facility, (2) the raw materials used and products manufactured at the facility and (3) the Standard Industrial Code which describes the type of activities carried out at the facility;
- Identification of past and present owners;
- 3. A discussion of the facility's past and present operations, including solid and hazardous waste generation, storage, treatment and disposal activities;
- 4. A brief discussion of each of the SWMUs identified in Condition B.1 of Section IIIV of this permit;
- 5. A description of all significant surface features (ponds, streams, depressions, etc.) and wells within 1,500 feet of the facility;
- 6. A description of all land usage within 1,500 feet of the facility, including all known SWMUs:
- 7. Identification of all human populations and environmental systems susceptible to contaminant exposure from releases from the SWMUs within a distance of at least 1,500 feet of the facility;
- 8. A description of any interim corrective action measures which were or are being planned or undertaken at the facility;
- 9. Approximate dates or periods of past spills or releases, identification of material spilled, amount spilled, location, and a description of the response actions, including any inspection reports or technical reports generated as a result of the spill or release.
- A current topographic map(s) showing a distance of at least 1,500 feet around the facility and other information described below, and at a scale

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of one inch equal to not more than 200 feet. Contours shall be shown on the map, with the contour interval being sufficient to clearly show the pattern of surface water flow. If such a map is not available, the workplan shall describe the method for generating the map for inclusion in the Phase I report. The map shall clearly show the following:

- a. Map scale, North arrow, date, and location of facility with respect to Township, Range and Section;
- b. Topography and surface drainage depicting all waterways, wetlands, 100 year floodplain, drainage patterns, and surface water areas;
- e. Property lines, with the owners of all adjacent property clearly indicated:
- d. Surrounding land use;
- e. Locations and boundaries of (1) all solid waste, including hazardous waste, management units, both past and present, (2) spill areas and (3) other suspected areas of contamination;
- f. All injection and withdrawal wells, and
- g. All buildings, tanks, piles, utilities, paved areas, easements, rightsof-way, and other features including all known past and present product and waste underground tanks or piping.

The map(s) shall be of sufficient detail and accuracy to locate and report all current and future RFI work performed at the site. The base map(s) shall be submitted in the Phase I report and modified in subsequent reports and workplans as appropriate.

B. NATURE AND EXTENT OF CONTAMINATION

The Phase I Workplan must contain the following information, to the extent known, for each of SWMUs identified in Condition B.1 of Section <u>III</u>V of the permit:

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1.	Location of unit/area;
2.	The horizontal and vertical boundaries of each unit/area;
3.	Details regarding the construction, operation and structural integrity of each unit/area;
4.	A description of all materials managed and/or disposed at each SWMU including, but not limited to, solid waste, hazardous wastes, and hazardous constituents to the extent they are known or suspected over the life of the facility including:
	(a) Type of waste or hazardous constituents placed in the units, including source, hazardous classification, quantity and chemical composition;
	(b) Physical and chemical characteristics, including physical form, physical description, general chemical class, cohesiveness of the waste;
5.	Quantities of solid and hazardous wastes managed by the unit;
6.	The history of the utilization of each SWMU and the surrounding areas, including the period of operation and age of the unit;
7.	Methods used to close the unit, if applicable;
8.	All available data and qualitative information on the level of contamination present at the SWMU;
9.	A description of the existing degree and extent of contamination at each unit area.
10.	Identification of additional information which must be gathered regarding 1-thru 9-above;

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C. ADMINISTRATIVE OUTLINE

The Permittee shall submit as part of the workplan for each phase of the RFI a general outline defining the RFI objectives, technical approach, and scheduling of tasks during that phase of the RFI. The Permittee shall prepare a Project Management Plan as part of each Phase Workplan which will include a discussion of the technical approach, schedules, budget, and personnel. The Project Management Plan must also include a description of the qualifications of personnel performing or directing the RFI, including contractor personnel. This plan shall also document the overall management approach to the current Phase of the RFI.

D. <u>SITE-SPECIFIC SAMPLING PLANS</u>

The Permittee shall prepare detailed site-specific sampling plans for each phase of the RFI which address all field activities needed to obtain site specific data. The plans must contain: a statement of sampling objectives, specifications of equipment, analyses of interest, sample types, sample locations and schedules for sampling. Wherever appropriate, sample collection, handling, preservation, preparation and analysis described in Test Methods for Evaluating Solid Wastes, Third Edition, (SW-846), shall be utilized. The plans must address all levels of the investigations, as well as types of investigations conducted on specific environmental media (i.e., soil, air, surface water, groundwater). The plans must describe in detail how each phase of the RFI will be implemented.

. Phase I Sampling and Analysis Plan

The Phase I Workplan must provide for a determination of the presence or absence of releases of hazardous waste and hazardous constituents into the soil around and under each SWMU or AOC for which soil was listed as an environmental media of concern in Section IIIV, Condition B.1 of this permit, based upon the information present in the Phase I Work Plan. To meet this requirement, the plan must identify:

a. Soils Investigation

(1) The procedures which will be used to describe and characterize the soils in and around the subject SWMU(s)

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down to the water table, including, but not limited to the following:

- (a) Unified Soil Classification;
- (b) Soil profile; and
 - (c) Elevation of water table;
 - (2) The parameters and hazardous constituents to be used to establish the presence or absence of contamination. These must include, but are not limited to, specific hazardous constituents of wastes known or suspected to have been managed by the SWMU(s) as identified and determined by the unit characterization information presented in the work plan.
 - (3) The basis for selecting the parameters and constituents in (3) above.
 - (4) The methodology for choosing sampling locations, depths, and numbers of samples.
 - (5) Sampling procedures for each parameter or constituent to be analyzed. All soil samples taken must be handled in accordance with 40 CFR 261, Appendix III and the Agency's DLPC soil volatile sampling procedure if volatiles are to be analyzed. All other environmental media samples must be collected and handled in accordance with EPA approved and standardized methods for evaluation of solid wastes.
 - (6) Analytical methods to be used in the analysis of the samples. If any of these methods is not consistent with those specified in Test Methods for Evaluating Solid Waste,

 Physical/Chemical Methods (U.S. EPA SW 846), a complete description of the methods to be used and the justification for not using the appropriate SW 846 methods must be provided.

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(7) Procedures and criteria for evaluating analytical results to establish the presence or absence of any contamination.

2. Phase II Sampling and Analysis Plan

The Phase II Sampling and Analysis plan, if necessary, must describe procedures to determine the nature and extent of hazardous waste and/or hazardous constituents released to the soil. This plan shall address and/or include, at a minimum:

- (1) A description of what is known about the horizontal and vertical extent of contamination;
- (2) A description of relevant contaminant and environmental chemical properties within the affected source area and plume, including solubility, specification absorption, leachability, exchange capacity biodegradability, hydrolysis, photolysis, oxidation and other factors that might affect contaminant migration and transformation (if known);
- (3) Specific contaminant concentrations, if known;
- (4) The horizontal and vertical velocity and direction of contaminant movement (if known);
- (5) An extrapolation of future contaminant movement (if known); and
- (6) The methods and criteria to be used to define the boundaries of the plume(s) of contamination;
- (7) The parameters and constituents to be used to establish the presence or absence of a plume of contamination. This must include, but need not be limited to, specific hazardous constituents of wastes known or suspected to have been placed in the SWMUs;
- (8) The basis for selecting the parameters and constituents in 7 above;
- (9) The methodology for choosing sampling locations depths, and numbers of samples;

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- (10) Sampling procedures for each parameter or constituent to be analyzed;
- (11) Analytical methods to be used in the analysis of the samples. If any of these methods are not identical to those specified in <u>Test Methods for Evaluating Solid Waste</u>, <u>Physical/Chemical Methods</u>, (US EPA SW 846), a complete description of the methods to be used and the justification for not using the SW 846 methods shall be provided; and
- (12) Procedures and criteria for evaluating analytical results to establish the presence or absence of any plume of contamination.

3. <u>Potential Receptors</u>

The Phase I RFI Workplan must provide data describing the human populations and environmental systems within a radius of 1,500 feet of the facility boundary that may be affected by releases from SWMUs must be collected and submitted to the Agency. The following characteristics shall be identified.

- a. Local uses and possible future uses of groundwater:
 - (1) Type of use (e.g. municipal or residential drinking water source, industrial, etc.); and
 - (2) Location of groundwater users, including wells and discharge areas.
- b. Local uses and possible future uses of surface waters draining the facility:
 - (1) Domestic and municipal;
 - (2) Recreational;
 - (3) Agricultural;
 - (4) Industrial; and
 - (5) Environmental.

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- e. Human use of, or access to, the facility and adjacent lands, including, but not limited to:
 - (1) Recreation;
 - (2) Agriculture;
 - (3) Residential;
 - (4) Commercial;
 - (5) Zoning; and
 - (6) Location between population locations and prevailing wind direction.
- d. A description of the biota in surface water bodies on, adjacent to, or affected by the facility.
- e. A description of ecology of, and adjacent to the facility.
- f. A demographic profile of the people who use or have access to the facility and adjacent land, including, but not limited to: age, sex, and sensitive subgroups.
- g. A description of any endangered or threatened species near the facility.

4. Hydrogeologic and Hydrologic Investigation

The potential for release to groundwater from a given SWMU must be investigated as part of Phase I of the RFI if prior environmental media investigations or information obtained from the RFA indicate releases from a SWMU may have migrated to the groundwater below the site. The Phase I hydrogeologic and geologic investigation plan must provide descriptions of groundwater monitoring systems which will provide adequate data on the detection, nature, extent and rate, and concentration of any release to the groundwater from each of these units.

Groundwater monitoring will not be required for a given SWMU during the RFI Phase I investigation if the Permittee can demonstrate; based upon data obtained

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from prior site specific environmental media investigations that no releases have occurred from the SWMU(s), or, based upon such environmental media investigations, that contaminants from the subject SWMU(s) have not entered the groundwater. Those units in Section IIIV, Condition B.1 of this permit which have "groundwater" as an environmental media of concern are the units for which a Phase I hydrogeologic and hydrologic investigation must be conducted.

The information which must be provided regarding the Phase I investigation of hydrogeology and hydrology at each SWMU identified above includes:

a. Information, as it is available, regarding:

- (1) The regional geologic and hydrogeologic characteristics in the vicinity of the facility, including stratigraphy, hydrogeologic flow and the areas of recharge and discharge;
- (2) Any topographic or geomorphic features that might influence the groundwater flow system;
- (3) The hydrogeologic properties of all of the hydrogeologic units found at the site down to the first bedrock aquitard, including: hydraulic conductivity and porosity, texture, uniformity and lithology; an interpretation of hydraulic interconnections between saturated zones, and zones of significant fracturing or channeling in the unconsolidated and consolidated deposits;
- (4) Using the facility map as a base, isopach and structural contour maps, and at least two (2) geologic cross sections showing the extent (depth, thickness, lateral extent) of all hydrogeologic units within the facility boundary, down to the first bedrock aquitard, identifying: all units in the unconsolidated and consolidated deposits; zones of higher permeability or lower permeability that might direct or restrict the flow of contaminants; perched aquifers; and the first saturated zone that may have a potential for migration of contaminants;
- (5) The water level or fluid pressure monitoring, including: water level contour maps and vertical gradient sections, well or piezometer

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- hydrographs and interpretation of the flow system, interpretation of any changes in hydraulic gradients, and seasonal fluctuation; and
- (6) Any man-made influences that may affect the hydrogeology of the site, identifying local water supply and production wells and other man-made hydraulic structures within 1500 feet of the facility boundary.
- b. Procedures for obtaining information identified in III.C.3.b above which was not obtained during preparation of the workplan.
- e. Documentation that sampling and analysis of groundwater monitoring wells will be carried out in accordance with the approved Data Collection Quality Assurance Plan as required in III.F. below. The Plan shall provide information on the design and installation of all groundwater monitoring wells. The designs shall be in accordance with the latest version of the Technical Enforcement Guidance Document (TEGD), where appropriate, and the latest version of the Agency's DLPC design criteria. At a minimum:
 - (1) The groundwater monitoring wells must consist of monitoring wells installed in the uppermost aquifer and in each underlying aquifer (e.g., sand units) which are hydraulically interconnected;
 - (2) At least one background monitoring well in each aquifer shall be installed hydraulically upgradient (i.e., in the direction of increasing static head) from the limit of the SWMUs, except to the extent that SWMUs in close proximity can be investigated with the same background well system. The number, locations, and depths must be sufficient to yield groundwater samples that are: (a) representative of background quality in the uppermost aquifer and units hydraulically interconnected beneath the facility; and (b) not affected by SWMUs at the subject facility; and
 - (3) Monitoring wells in each appropriate aquifer shall be installed hydraulically downgradient (i.e., in the direction of decreasing static head) at the limit of the SWMU or at the limit of each group of proximate SWMUs. Their number, locations and depths must

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ensure that they allow for detection of releases of hazardous waste or hazardous constituents from the SWMU(s).

d. A sampling plan which specifies:

- (1) The parameters and constituents to be used to establish the presence or absence of a plume of contamination. These must include, but need not be limited to, specific hazardous constituents of wastes determined to have been placed in or released from the SWMUs (including any possible degradation products);
- (2) The basis for selecting the parameters and constituents in (1) above;
- (3) The methodology for investigating the hydrostratigraphic units at site, and the locations, depths, and concentration specifications for each monitoring well;
- (4) Sampling procedures for each parameter or constituent to be analyzed, including sampling frequency;
- (5) Analytical methods to be used in the analysis of the samples. If any of these methods is not consistent with those specified in <u>Test</u> Methods for Evaluating Solid Waste, Physical/Chemical Methods (U.S. EPA SW-846), a complete description of the methods to be used and the justification for not using the appropriate SW-846 methods will be provided; and
- (6) Procedures and criteria for evaluating analytical results to establish the presence or absence of any plume of contamination.

If the Agency's DLPC determines from the data obtained during the Phase III investigation that releases of hazardous waste or hazardous constituents have occurred to the groundwater or that the data are inconclusive, the Permittee will be required to submit a Groundwater Monitoring Plan to determine the vertical and horizontal distribution of the contaminants identified and to predict the long term disposition of the contaminants. This groundwater monitoring program will require proposals for establishing the locations, depths, and construction specifications for additional monitoring wells necessary to delineate the extent of any

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plume. The methodology of the investigation, the sampling procedures, analytical methods, and procedures for evaluating analytical results to establish the extent of the plume shall be the same as above unless specifically identified in the Phase III workplan. The Groundwater Monitoring Plan must also specify the criteria which will be used to determine the limits of the plume.

5. Field screening techniques and other techniques utilized in detecting/evaluating petroleum releases may be used in conducting the RFI, if specifically approved by the Agency. However, detailed laboratory analyses must be used to (1) confirm the data collected using these techniques; (2) identify conclusively the horizontal and vertical extent of contamination and (3) demonstrate that no additional corrective action is necessary to a particular SWMU.

E. - DATA COLLECTION QUALITY ASSURANCE

The Permittee shall prepare a plan to document all monitoring procedures, sampling, field measurements, and sample analysis performed during the investigation so as to ensure that all information, data and resulting decisions are technically sound, statistically valid, and properly documented. This shall be submitted with each Phase Workplan.

Quality Assurance. Sampling methods and equipment, as well as laboratory analytical methods, shall follow guidance in U.S. EPA's SW-846, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (see 40 CFR 260.11) if appropriate. All field sampling methods not included in SW-846 must be approved by the Agency's DLPC before they are used in the RFI. This includes methods such as drilling, borings, etc. When applicable, standard procedures, as defined by U.S. EPA, IEPA or ASTM, should be followed. All soil samples which are to be taken must be handled in accordance with 40 CFR, Part 261, Appendix III and the Agency's soil volatile sampling procedures if volatile sampling is required. The analytical methods which will be used must be specified and must be approved by the Agency before they are implemented.

F. DATA MANAGEMENT PLAN

The Permittee shall develop and initiate a Data Management Plan to document and track investigation data and results. This Plan shall identify and set up data documentation materials and procedures, project file requirements, and project related progress reporting procedures and documents. The Plan shall also provide the format to be used to present

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the raw data and conclusions of the investigation(s). This plan shall be submitted with the Workplan for each Phase of the RFI.

G. IMPLEMENTATION OF INTERIM MEASURES

At any time during the RFI the Permittee may initiate interim measures for the purpose of preventing continuing releases and/or mitigating the results of releases and/or mitigating the migration of hazardous wastes or hazardous constituents. It shall not be necessary to conduct all phases of the RFI investigation if the Agency's DLPC and the Permittee agree that a problem can be corrected, or a release cleaned up, without additional study and/or without a formal CMS.

The Permittee shall submit information on any past or ongoing interim measures which have been or are to be undertaken to abate threats to human health and the environment to the Agency's DLPC for approval. This information shall include, at a minimum:

- Objectives of the interim measures: how the measure is mitigating a potential threat to human health and the environment and/or is consistent with and integrated into any long term solution at the facility;
- 2. Design, construction, and maintenance requirements;
- 3. Schedules for design and construction; and
- Schedules for progress reports.

If the Agency's DLPC determines that a release cannot be addressed without additional study and/or a formal CMS then the Agency's DLPC will notify the Permittee that these must be performed. Any proposal made under this provision or any other activity resulting from such proposal, including the invocation of dispute resolution, shall not affect the schedule for implementation of the RFI or of any other portion of the permit.

If the Agency determines that interim measures are necessary to protect human health or the environment, the Permittee will be notified by way of a permit modification.

H. HEALTH AND SAFETY PLAN

Under the provisions of 29 CFR 1910 (54 FR 9,295, March 6, 1989), cleanup operations must meet the applicable requirements of OSHA's Hazardous Waste Operations and

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Emergency Response standard. These requirements include hazard communication, medical surveillance, health and safety programs, air monitoring, decontamination and training. General site workers engaged in activities that expose or potentially expose them to hazardous substances must receive a minimum of 40 hours of safety and health training off site plus a minimum of three days of actual field experience under the direct supervision of a trained experienced supervisor. Managers and supervisors at the cleanup site must have at least an additional eight hours of specialized training on managing hazardous waste operations. As such, a Health and Safety Plan must be contained in the Workplan for each phase of the RFI.

I. IMPLEMENTATION OF RFI

The Permittee shall conduct those investigations necessary to characterize the site, and to determine the nature, rate and extent of migration, and concentrations of hazardous waste and hazardous constituents, if any, released from the SWMU's into the surface water and sediments, groundwater, air, and soil. The investigations must be of adequate technical content to support the development and evaluation of a corrective action program, if one is deemed necessary by the Agency's DLPC.

The investigation activities shall follow the plans and procedures set forth in the Workplan(s) and the RFI schedule. Any actual or anticipated deviations from the Workplan(s) or the RFI schedule shall be reported no later than the time of submission of the next quarterly report required by Section IIIV subsequent to the determination of need or actual deviation from the Workplan. The Permittee may use, when appropriate, previous investigation results to expedite the investigation process.

J. <u>SUBMISSION OF REPORTS AND RESULTS OF RFI ACTIVITIES</u>

The Permittee must prepare and submit quarterly progress reports and a final report on the activities and results of each Phase of the RFI activities as appropriate. The progress reports shall contain at a minimum:

- An estimate of the percentage of the investigation completed;
- -2. Summary of activities completed during the reporting period;
- 3. Summaries of all actual or proposed changes to the Workplan or its implementation;

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4. Summaries of all actual or period;	potential problems encountered during the reporting
5. Proposal for correcting any	problems;
6. Projected work for the next	reporting period; and
	requested in writing by the Agency's DLPC.
	nust be submitted to the Agency for review and nedule set forth in the following table:
Facility Action	Due Date
Completion of RFI Phase I investigation and submission of Phase I Report and Summary	To be specified in the Phase I Workplan
Submission of RFI Phase II Workplan	- Within 90 days after notification of the need of Phase II by Agency's DLPC
Completion of RFI Phase II investigation and submission of Phase II Report and Summary	To be specified in the Phase II workplan
Submission of RFI Phase III Workplan	Within 90 days after notification of the need for Phase III
Completion of RFI Phase III investigation- and submission of Phase III Report and Summary	To be specified in the Phase III Workplan
and submission of Phase III Report and	To be specified in the Phase III Workplan To be specified in workplans

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ATTACHMENT \underline{AC}

Detection Monitoring Groundwater Corrective Action Program
Attachments and Figures

LPC #1191150001

ILD#982700967

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ATTACHMENT AC

Detection Monitoring

LPC #1191150001

ILD#982700967

RCRA Log No. 147

September, 1993

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 5 HAZARDOUS WASTE MANAGEMENT PERMIT

Name of Permittee: Amoco Oil Company Wood River Main Plant

Facility Location: Street Address: 301 Evans Avenue, P.O. Box 65
City, State: Wood River, Illinois 62095

EPA Identification Number: ILD 980 700 967

Effective Date: (35 days after signature)

Expiration Date: (Ten years after the effective date)

Authorized Activities:

Pursuant to the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA) of 1976, and the Hazardous and Solid Waste Amendments (HSWA) of 1984 (42 U.S.C. §6901, et seq.), and regulations promulgated thereunder by the United States Environmental Protection Agency (U.S. EPA) (codified in Title 40 of the Code of Federal Regulations (40 CFR)), Federal permit conditions (hereinafter called the permit) of the RCRA permit are issued to Amoco Oil Company Wood River Main Plant (hereinafter called the Permittee), for the facility located in Wood River, Illinois.

The RCRA permit contains both the effective Federal permit conditions (contained herein) and the effective State permit conditions issued by the State of Illinois RCRA program authorized under 40 CFR Part 271 (hereinafter called the State permit). The RCRA permit authorizes the Permittee to conduct hazardous waste management activities as specified in the RCRA permit.

Permit Approval:

On January 31, 1986, the State of Illinois received final authorization pursuant to Section 3006 of RCRA, 42 U.S.C. §6926, and 40 CFR Part 271, to administer the pre-HSWA RCRA hazardous waste program. On April 30, 1990, the State of Illinois also received authorization to administer certain specific portions of the hazardous waste program required under HSWA. Because the State of Illinois has not yet received authorization to administer the entire hazardous waste program requirements of HSWA, certain permit conditions must be issued by the U.S. EPA to address these requirements. These conditions are contained in this permit.

The Permittee must comply with all terms and conditions of this permit. This permit consists of the conditions contained herein (including those in any attachments) and the applicable regulations contained in 40 CFR Parts 260, 261, 262, 264, 266, 268, 270, and 124, and applicable provisions of HSWA.

This permit is based on the assumption that the information submitted in the permit application, dated April 1, 1992, and in any subsequent amendments (hereinafter referred to as the application), is accurate. Any inaccuracies found in this information may be grounds for the termination, revocation and reissuance, or modification of this permit (see 40 CFR 270.41, 270.42 and 270.43) and potential enforcement action. The Permittee must inform the U.S. EPA of any deviation from or changes in the information in the submitted application as soon as the Permittee becomes aware of such deviation or changes.

Opportunity to Appeal:

Petitions for review must be submitted within 30 days after service of notice of the final permit decision. Any person who filed comments on the draft permit or participated in the public hearing may petition the Environmental Appeals Board to review any condition of the permit decision. Any person who failed to file comments or failed to participate in the public hearing on the draft permit may petition for administrative review only to the extent of the changes from the draft to the final permit decision. The procedures for permit appeals are found in 40 CFR 124.19.

Effective Date:

This permit is effective as of the effective date specified on the previous page, unless a review is requested under 40 CFR 124.19. The permit shall remain in effect until the expiration date, unless revoked and reissued, or terminated (40 CFR 270.41 and 270.43), or continued in accordance with 40 CFR 270.51.

3y:	Norman R. Niedergang Associate Division Director Office of RCRA Waste Management Division	
Date:		

Amoco Oil Company Wood River Main Plant Wood River, Illinois

PERMIT INDEX

PERMIT CONDITIONS:

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I.	Standard Conditions
II.	Land Disposal Requirements
III.	Toxicity Characteristic
TV.	Air Emission Standards

Schedule of Compliance

PERMIT CONDITIONS

(Note: The regulatory citations in parentheses are incorporated by reference.)

I. STANDARD CONDITIONS

A. <u>EFFECT OF PERMIT</u> (40 CFR 270.4 and 270.30(g))

The Permittee is allowed to manage hazardous waste in accordance with the conditions of the RCRA permit. Any management of hazardous waste not authorized in the RCRA permit is prohibited.

Compliance with the RCRA permit during its term constitutes compliance, for the purposes of enforcement, with Subtitle C of RCRA, except for those requirements not included in the permit which become effective by statute, or which are promulgated under 40 CFR Part 268, restricting the placement of hazardous waste in or on the land. Issuance of this permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of State or local law or regulations. Compliance with the terms of this permit does not constitute a defense to any order issued or any action brought under Sections 3008(a), 3008(h), 3013, or 7003 of RCRA; Sections 104, 106(a), or 107 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended (42 U.S.C. §9601 et seq., commonly known as CERCLA); or any other law providing for protection of public health or the environment.

B. PERMIT ACTIONS (40 CFR 270.30(f))

This permit may be modified, revoked and reissued, or terminated for cause as specified in 40 CFR 270.41, 270.42, and 270.43. This permit may also be reviewed and modified by the U.S. EPA, consistent with 40 CFR 270.41, to include any terms and conditions determined necessary to protect human health and the environment pursuant to Section 3005(c)(3) of RCRA. The filing of a request for a permit modification, revocation and reissuance, or termination, or the notification of planned changes, or anticipated noncompliance on the part of the Permittee does not stay the applicability or enforceability of any permit condition. The Permittee shall not perform any construction associated with a Class 3 permit modification request until such modification request is approved and the modification becomes effective.

C. <u>SEVERABILITY</u> (40 CFR 124.16)

The provisions of this permit are severable, and if any provision of this permit, or if the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby.

D. DUTIES AND REQUIREMENTS

1. <u>Duty to Comply</u>. (40 CFR 270.30(a))

The Permittee shall comply with all conditions of this permit, except to the extent and for the duration such noncompliance is authorized by an emergency permit (See 40 CFR 270.61). Any permit noncompliance, other than noncompliance authorized by an emergency permit, constitutes a violation of RCRA and HSWA and is grounds for enforcement action, permit termination, revocation and reissuance, modification, denial of a permit renewal application, or other appropriate action.

2. Duty to Reapply. (40 CFR 270.30(b) and 270.10(h))

The Permittee shall submit a complete application for a new permit at least 180 days before this permit expires unless: a) the Permittee no longer wishes to operate a hazardous waste management facility; b) the Permittee is no longer required to have a RCRA permit; or c) permission for a later date has been granted by the Regional Administrator. The Regional Administrator shall not grant permission for applications to be submitted later than the expiration date of the existing permit.

3. Permit Expiration. (40 CFR 270.13, 270.14, 270.50, and 270.51)

This permit and all conditions herein shall be effective for a fixed term <u>not to exceed 10 years</u>, and will remain in effect beyond the permit's expiration date only if the Permittee has submitted a timely, complete application (per 40 CFR 270.10 and applicable sections of 270.14 through 270.29): a) to both the U.S. EPA and the State; and b) through no fault of the Permittee, the Regional Administrator and the State have not issued a new permit, as set forth in 40 CFR 270.51.

4. Need to Halt or Reduce Activity Not a Defense. (40 CFR 270.30(c))

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

5. <u>Duty to Mitigate</u>. (40 CFR 270.30(d))

In the event of releases or noncompliance with the permit, the Permittee shall take all reasonable steps to minimize releases to the environment and shall carry out such measures as are reasonable to prevent significant adverse impacts on human health and the environment.

6. Proper Operation and Maintenance. (40 CFR 270.30(e))

The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality control/quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit.

7. Duty to Provide Information. (40 CFR 270.30(h) and 264.74)

The Permittee shall furnish to the Regional Administrator, within the time designated by the Regional Administrator, any relevant information which the Regional Administrator may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The Permittee shall also furnish to the Regional Administrator, upon request, copies of records required to be kept by this permit.

Inspection and Entry. (40 CFR 270.30(i))

The Permittee shall allow the Regional Administrator, or an authorized representative, upon the presentation of credentials and other documents as may be required by law to:

- a. Enter at reasonable times upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- d. Sample or monitor, at reasonable times, for the purposes of assuring permit compliance, or as otherwise authorized by RCRA, any substances or parameters at any location.

9. <u>Monitoring and Recordkeeping</u>. (40 CFR 270.30(j), 270.31, 264.73, and 264.74)

The Permittee shall retain all reports, records, or other documents, required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the reports, records or other documents. These periods may be extended by request of the Regional Administrator at any time and are automatically extended during the course of any unresolved enforcement action regarding this facility.

10. Reporting Planned Changes. (40 CFR 270.30(1)(1))

The Permittee shall give notice to the Regional Administrator of any planned physical alterations or additions to the permitted facility, as soon as possible, and at least 30 days before construction of such alteration or addition is commenced.

11. Anticipated Noncompliance. (40 CFR 270.30(1)(2))

The Permittee shall give advance notice to the Regional Administrator of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements. Such notice does not constitute a waiver of the Permittee's duty to comply with permit requirements.

12. Transfer of Permits. (40 CFR 270.30(1)(3), 270.40(a), and 264.12(c))

This permit may be transferred by the Permittee to a new owner or operator only after providing notice to the Regional Administrator and only if the permit is modified, or revoked and reissued, pursuant to $40\ \text{CFR}\ 270.40(b),\ 270.41(b)(2),\ \text{or}\ 270.42(a).}$ Before transferring ownership or operation of the facility during its operating life, the Permittee shall notify the new owner or operator in writing of the requirements of $40\ \text{CFR}\ \text{Parts}\ 264,\ 268,\ \text{and}\ 270$ (including all applicable corrective action requirements), and shall provide a copy of the RCRA permit to the new owner or operator.

13. <u>Compliance Schedules</u>. (40 CFR 270.30(1)(5) and 270.33)

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted to the Regional Administrator no later than 14 days following each scheduled date.

14. <u>Twenty-four Hour Reporting</u>. (40 CFR 270.30(1)(6) and 270.33)

The Permittee shall report to the Regional Administrator any noncompliance with this permit which may endanger human health or the environment. Any such information shall be reported orally within 24 hours from the time the Permittee becomes aware of the circumstances. This report shall include the following:

- a. Information concerning the release of any hazardous waste which may endanger public drinking water supplies; and
- b. Information concerning the release or discharge of any hazardous waste, or of a fire or explosion at the facility, which could threaten the environment or human health outside the facility. The description of the occurrence and its cause shall include:
 - (1) Name, address, and telephone number of the owner or operator;
 - (2) Name, address, and telephone number of the facility;
 - (3) Date, time, and type of incident;
 - (4) Name and quantity of material(s) involved;
 - (5) The extent of injuries, if any;
 - (6) An assessment of actual or potential hazard to the environment and human health outside the facility, where this is applicable; and
 - (7) Estimated quantity and disposition of recovered material that resulted from the incident.

A written submission shall also be provided within 5 days of the time the Permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period(s) of noncompliance (including exact dates and times); steps taken to minimize impact on the environment; whether the noncompliance has been corrected, and if not, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate and prevent recurrence of the noncompliance. The Permittee need not comply with the 5-day written notice requirement if the Regional Administrator waives the requirement. Upon waiver of the 5-day requirement, the Permittee shall submit a written report within 15 days of the time the Permittee becomes aware of the circumstances.

15. Other Noncompliance. (40 CFR 270.30(1)(10))

The Permittee shall report all other instances of noncompliance not otherwise required to be reported above within 15 days of when the Permittee becomes aware of the noncompliance. The reports shall contain the information listed in Condition I.D.14.

16. Other Information. (40 CFR 270.30(1)(11))

Whenever the Permittee becomes aware that it failed to submit any relevant facts, or submitted incorrect information to the Regional Administrator in the permit application or in any reports, records, or other documentation provided to the Regional Administrator, the Permittee shall promptly submit such facts or information.

17. Submittal of Reports or Other Information. (40 CFR 270.30(1)(7), (8), and (9), and 270.31)

All reports or other information required to be submitted pursuant to this permit shall be sent to:

RCRA Permitting Branch, HRP-8J Waste Management Division U.S. EPA, Region 5 77 West Jackson Boulevard Chicago, Illinois 60604-3590

Attention: Illinois Section

18. All other requirements contained in RCRA, <u>as amended</u>, and in 40 CFR 270.30 not set forth herein are hereby fully incorporated in this permit.

E. <u>SIGNATORY REQUIREMENT</u> (40 CFR 270.30(k))

All reports or other information submitted to or requested by the Regional Administrator, his designee, or authorized representative, shall be signed and certified as required by 40 CFR 270.11.

F. CONFIDENTIAL INFORMATION

In accordance with 40 CFR 270.12 and 40 CFR Part 2, Subpart B, any information submitted to the U.S. EPA pursuant to this permit may be claimed as confidential by the submitter. Any such claim must be asserted at the time of submission in the manner prescribed on the application form or instructions, or, in the case of other submissions, by marking the words "Confidential Business Information" on each page containing such information. If no claim is made at time of submission, the U.S. EPA may make the information available to the public without further notice. If a claim is

asserted, the information will be treated in accordance with the procedures in 40 CFR Part 2.

G. DOCUMENTS TO BE MAINTAINED AT THE FACILITY

The Permittee shall maintain at the facility, until closure is completed and certified by an independent registered professional engineer, all items required by 40 CFR 264.73, including the following documents and all amendments, revisions, and modifications to these documents:

- 1. Waste Analysis Plan, as required by 40 CFR 264.13 and this permit;
- 2. Operating Record, as required by 40 CFR 264.73 and this permit;
- 3. Notifications from generators accompanying each incoming shipment of wastes subject to 40 CFR Part 268, Subtitle C, that specify treatment standards, as required by 40 CFR 264.73, 268.7, and this permit; and
- 4. Records regarding closed-vent systems and control devices and/or equipment leaks as required by 40 CFR 264.1035, 264.1064, and 264.73, and Condition IV.C. of this permit.

II. LAND DISPOSAL REQUIREMENTS

A. GENERAL CONDITIONS

- The Permittee shall comply with all the applicable self-implementing requirements of 40 CFR Part 268 and all applicable land disposal requirements which become effective by statute (Section 3004 of RCRA).
- 2. A mixture of any restricted waste with nonrestricted waste(s) is a restricted waste under 40 CFR Part 268.
- 3. The Permittee shall not in any way dilute a restricted waste or the residual from treatment of a restricted waste as a substitute for adequate treatment to achieve compliance with 40 CFR Part 268, Subpart D, to circumvent the effective date of a prohibition in 40 CFR Part 268, Subpart C, to otherwise avoid a prohibition in 40 CFR Part 268, Subpart C, or to circumvent a land disposal prohibition imposed by Section 3004 of RCRA.
- 4. The Permittee shall prepare and maintain a current list of the hazardous waste codes handled by the facility that are identified in 40 CFR 268, Subparts B and C. The list shall include all waste codes handled by the facility, and any associated treatment standards, and shall be updated through the inclusion of new treatment standards, as promulgated or amended. This list shall be provided to the U.S. EPA representatives, or their designees, upon request.

B. TESTING AND RELATED REQUIREMENTS

- 1. The Permittee must test, in accordance with 40 CFR 268.7(a), any waste generated at the facility, or use knowledge of the waste, to determine if the waste is restricted from land disposal.
- 2. For restricted wastes with treatment standards expressed as concentrations in the waste extract, as specified in 40 CFR 268.41, the Permittee shall test the wastes or waste treatment residues, or extracts of such residues developed using the test methods described in Appendix II of 40 CFR Part 261 (Toxicity Characteristic Leaching Procedure, or TCLP) to assure that the wastes or waste treatment residues or extracts meet the applicable treatment standards of 40 CFR Part 268, Subpart D. Such testing shall be performed as required by 40 CFR 264.13.
- 3. A restricted waste for which a treatment technology is specified under 40 CFR 268.42(a) may be land disposed after it is treated using that specified technology or an equivalent treatment method approved by the Administrator under the procedures set forth in 40 CFR 268.42(b).
- 4. For restricted wastes with treatment standards expressed as concentrations in the waste, as specified in 40 CFR 268.43, the Permittee shall test the wastes or waste treatment residues (not extracts of such residues) to assure that the wastes or waste treatment residues meet the applicable treatment standards of 40 CFR Part 268, Subpart D. Such testing shall be performed as required by 40 CFR 264.13.
- 5. The Permittee shall comply with all the applicable notification, certification, and recordkeeping requirements described in 40 CFR 268.7(a) and (b).

C. STORAGE PROHIBITIONS

- 1. The Permittee shall comply with all the applicable prohibitions on storage of restricted wastes specified in 40 CFR Part 268, Subpart E.
- 2. Except as otherwise provided in 40 CFR 268.50, the Permittee may store restricted wastes in tanks and containers solely for the purpose of the accumulation of such quantities of hazardous wastes as necessary to facilitate proper recovery, treatment, or disposal provided that:
 - a. Each container is clearly marked to identify its contents and the date each period of accumulation begins; and
 - b. Each tank is clearly marked with a description of its contents, the quantity of each hazardous waste received, and the date each period of accumulation begins, or such information for each tank is recorded and maintained in the operating record at that facility.

- 3. The Permittee may store restricted wastes for up to 1 year unless the U.S. EPA or its authorized agent can demonstrate that such storage was not solely for the purpose of accumulating such quantities of hazardous waste as are necessary to facilitate proper recovery, treatment or disposal.
- 4. The Permittee may store restricted wastes beyond 1 year; however, the Permittee bears the burden of proving that such storage was solely for the purpose of accumulating such quantities of hazardous waste as are necessary to facilitate proper recovery, treatment or disposal.
- 5. The Permittee shall not store any liquid hazardous waste containing polychlorinated biphenyls (PCBs) at concentrations greater than or equal to 50 ppm unless the waste is stored in a storage facility that meets the requirements of 40 CFR 761.65(b). This waste must be removed from storage and treated or disposed as required by 40 CFR Part 268 within 1 year of the date when such wastes are first put into storage. Condition II.C.4. above, that allows storage for over 1 year with specified demonstration, does not apply to PCB wastes prohibited under 40 CFR 268.32.

III. TOXICITY CHARACTERISTIC

A. WASTE CHARACTERIZATION

The Permittee must use the Toxicity Characteristic Leaching Procedure (TCLP) (Appendix II of 40 CFR Part 261), or use knowledge of the waste to determine whether a waste exhibits the characteristic of toxicity, as defined in 40 CFR 261.24. Use of the TCLP does not exempt the Permittee from also using the Extraction Procedure (EP) toxicity test if required by the State permit conditions.

IV. AIR EMISSION STANDARDS

A. PROCESS VENTS

The Permittee shall comply with all applicable requirements of 40 CFR Part 264, Subpart AA, regarding air emission standards for process vents.

B. EQUIPMENT LEAKS

The Permittee shall comply with all applicable requirements of 40 CFR Part 264, Subpart BB, regarding air emission standards for equipment leaks.

C. RECORDKEEPING

The Permittee shall comply with all applicable recordkeeping and reporting requirements described in 40 CFR 264.1035, 264.1036, 264.1064, and 264.1065.

D. NOTIFICATION OF REGULATED ACTIVITY

The Permittee shall notify the Regional Administrator of any waste management units which become subject to the requirements of 40 CFR Part 264, Subparts AA and BB, within 30 days of startup of the regulated activity.

E. DUTY TO COMPLY WITH FUTURE REQUIREMENTS

The Permittee shall comply with all self-implementing provisions of any future air regulations promulgated under the provisions of Section 3004(n) of RCRA, as amended by HSWA.

V. SCHEDULE OF COMPLIANCE

Air Emission Regulations

Notification of waste management units subject to the requirements of 40 CFR Part 264, Subparts AA and BB.

<u>Due Date</u>

30 days after startup of the activity.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5

77 WEST JACKSON BOULEVARD CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:

HRP-8J

Mr. Lawrence Eastep, Manager
Permits Section
Illinois Environmental Protection Agency
Division of Land Pollution Control
2200 Churchill Road
P.O. Box 19276
Springfield, Illinois 62794-9276

RE: Amoco Oil Company Wood River Main

Plant. ILD 980 700 967

Dear Mr. Eastep:

Enclosed are copies of the Federal portion of the Hazardous Waste Management Final Permit and the Response to Comments for the referenced facility. Please insert the effective date and the expiration date on the first page of the Federal permit to coincide with the State portion of the permit. Also, provide a copy of the Federal portion of the permit to the Owner and to the Operator of the facility, and copies of the Response to Comments and Federal appeal procedures (40 CFR 124.19) to all interested parties in accordance with Activity 10 of the Illinois EPA/U.S. EPA Joint Permitting Procedures.

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George J. Hamper, P.E. Chief, Illinois Section RCRA Permitting Branch

Enclosures

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9-3-93

RCRA	FINAL	PERMIT	SIGN-OFF

	BACKG		_	
)	FACIL (Ow FACIL	ITY NAME 1 Amoco O: Company Woul K ner/Operator) ITY LOCATION Woul River, IL ID NUMBER	iver Main ILO 98	<u>Plant</u> 0700967
	TYPE	OF PERMIT		
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		STORAGE BIF	DISPOSAL	
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	CONCU	RRENCES	<u>INITIALS</u>	DATE
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	2.	SECTION SECRETARY Aypist	76	9-3-93
	3.	SECTION CHIEF	LAH.	9-8-93
	4.	TECHNICAL EXPERT (if applicable)		
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		RDS CHIEF		
	6.	ASST. REG. COUNSEL (ORC) Name: R. Murawski	<u>RM</u>	9-22-93
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	8.	SWERB SECTION CHIEF (ORC)	gr.	9.22.73
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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 5 HAZARDOUS WASTE MANAGEMENT PERMIT

Name of Permittee:	Amoco Oil Company Wood River Main Plant
Facility Location:	Street Address: 301 Evans Avenue, P.O. Box 65 City, State: Wood River, Illinois 62095
EPA Identification	Number: ILD 980 700 967
Effective Date:	
Expiration Date:	

Authorized Activities:

Pursuant to the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA) of 1976, and the Hazardous and Solid Waste Amendments (HSWA) of 1984 (42 U.S.C. §6901, et seq.), and regulations promulgated thereunder by the United States Environmental Protection Agency (U.S. EPA) (codified in Title 40 of the Code of Federal Regulations (40 CFR)), Federal permit conditions (hereinafter called the permit) of the RCRA permit are issued to Amoco Oil Company Wood River Main Plant (hereinafter called the Permittee), for the facility located in Wood River. Illinois.

The RCRA permit contains both the effective Federal permit conditions (contained herein) and the effective State permit conditions issued by the State of Illinois RCRA program authorized under 40 CFR Part 271 (hereinafter called the State permit). The RCRA permit authorizes the Permittee to conduct hazardous waste management activities as specified in the RCRA permit.

Permit Approval:

On January 31, 1986, the State of Illinois received final authorization pursuant to Section 3006 of RCRA, 42 U.S.C. §6926, and 40 CFR Part 271, to administer the pre-HSWA RCRA hazardous waste program. On April 30, 1990, the State of Illinois also received authorization to administer certain specific portions of the hazardous waste program required under HSWA. Because the State of Illinois has not yet received authorization to administer the entire hazardous waste program requirements of HSWA, certain permit conditions must be issued by the U.S. EPA to address these requirements. These conditions are contained in this permit.

The Permittee must comply with all terms and conditions of this permit. This permit consists of the conditions contained herein (including those in any attachments) and the applicable regulations contained in 40 CFR Parts 260, 261, 262, 264, 266, 268, 270, and 124, and applicable provisions of HSWA.

This permit is based on the assumption that the information submitted in the permit application, dated April 1, 1992, and in any subsequent amendments (hereinafter referred to as the application), is accurate. Any inaccuracies found in this information may be grounds for the termination, revocation and reissuance, or modification of this permit (see 40 CFR 270.41, 270.42 and 270.43) and potential enforcement action. The Permittee must inform the U.S. EPA of any deviation from or changes in the information in the submitted application as soon as the Permittee becomes aware of such deviation or changes.

Opportunity to Appeal:

Petitions for review must be submitted within 30 days after service of notice of the final permit decision. Any person who filed comments on the draft permit or participated in the public hearing may petition the Environmental Appeals Board to review any condition of the permit decision. Any person who failed to file comments or failed to participate in the public hearing on the draft permit may petition for administrative review only to the extent of the changes from the draft to the final permit decision. The procedures for permit appeals are found in 40 CFR 124.19.

Effective Date:

This permit is effective as of the effective date specified on the previous page, unless a review is requested under 40 CFR 124.19. The permit shall remain in effect until the expiration date, unless revoked and reissued, or terminated (40 CFR 270.41 and 270.43), or continued in accordance with 40 CFR 270.51.

Norman R. Niedergang
Associate Division Director
Office of RCRA
Waste Management Division

Date: 9/24/93

Amoco Oil Company Wood River Main Plant Wood River, Illinois

PERMIT INDEX

PERMIT CONDITIONS:

I.	Standard Conditions
II.	Land Disposal Requirements
III.	Toxicity Characteristic
IV.	Air Emission Standards

V. Schedule of Compliance

PERMIT CONDITIONS

(Note: The regulatory citations in parentheses are incorporated by reference.)

I. STANDARD CONDITIONS

A. <u>EFFECT_OF_PERMIT</u> (40 CFR 270.4 and 270.30(g))

The Permittee is allowed to manage hazardous waste in accordance with the conditions of the RCRA permit. Any management of hazardous waste not authorized in the RCRA permit is prohibited.

Compliance with the RCRA permit during its term constitutes compliance, for the purposes of enforcement, with Subtitle C of RCRA, except for those requirements not included in the permit which become effective by statute, or which are promulgated under 40 CFR Part 268, restricting the placement of hazardous waste in or on the land. Issuance of this permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of State or local law or regulations. Compliance with the terms of this permit does not constitute a defense to any order issued or any action brought under Sections 3008(a), 3008(h), 3013, or 7003 of RCRA; Sections 104, 106(a), or 107 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended (42 U.S.C. §9601 et seq., commonly known as CERCLA); or any other law providing for protection of public health or the environment.

B. PERMIT ACTIONS (40 CFR 270.30(f))

This permit may be modified, revoked and reissued, or terminated for cause as specified in 40 CFR 270.41, 270.42, and 270.43. This permit may also be reviewed and modified by the U.S. EPA, consistent with 40 CFR 270.41, to include any terms and conditions determined necessary to protect human health and the environment pursuant to Section 3005(c)(3) of RCRA. The filing of a request for a permit modification, revocation and reissuance, or termination, or the notification of planned changes, or anticipated noncompliance on the part of the Permittee does not stay the applicability or enforceability of any permit condition. The Permittee shall not perform any construction associated with a Class 3 permit modification request until such modification request is approved and the modification becomes effective.

C. <u>SEVERABILITY</u> (40 CFR 124.16)

The provisions of this permit are severable, and if any provision of this permit, or if the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby.

D. <u>DUTIES AND REQUIREMENTS</u>

1. Duty to Comply. (40 CFR 270.30(a))

The Permittee shall comply with all conditions of this permit, except to the extent and for the duration such noncompliance is authorized by an emergency permit (See 40 CFR 270.61). Any permit noncompliance, other than noncompliance authorized by an emergency permit, constitutes a violation of RCRA and HSWA and is grounds for enforcement action, permit termination, revocation and reissuance, modification, denial of a permit renewal application, or other appropriate action.

2. <u>Duty to Reapply</u>. (40 CFR 270.30(b) and 270.10(h))

The Permittee shall submit a complete application for a new permit at least 180 days before this permit expires unless: a) the Permittee no longer wishes to operate a hazardous waste management facility; b) the Permittee is no longer required to have a RCRA permit; or c) permission for a later date has been granted by the Regional Administrator. The Regional Administrator shall not grant permission for applications to be submitted later than the expiration date of the existing permit.

3. Permit Expiration. (40 CFR 270.13, 270.14, 270.50, and 270.51)

This permit and all conditions herein shall be effective for a fixed term <u>not to exceed 10 years</u>, and will remain in effect beyond the permit's expiration date only if the Permittee has submitted a timely, complete application (per 40 CFR 270.10 and applicable sections of 270.14 through 270.29): a) to both the U.S. EPA and the State; and b) through no fault of the Permittee, the Regional Administrator and the State have not issued a new permit, as set forth in 40 CFR 270.51.

4. Need to Halt or Reduce Activity Not a Defense. (40 CFR 270.30(c))

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

Duty to Mitigate. (40 CFR 270.30(d))

In the event of releases or noncompliance with the permit, the Permittee shall take all reasonable steps to minimize releases to the environment and shall carry out such measures as are reasonable to prevent significant adverse impacts on human health and the environment.

6. Proper Operation and Maintenance. (40 CFR 270.30(e))

The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality control/quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit.

7. Duty to Provide Information. (40 CFR 270.30(h) and 264.74)

The Permittee shall furnish to the Regional Administrator, within the time designated by the Regional Administrator, any relevant information which the Regional Administrator may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The Permittee shall also furnish to the Regional Administrator, upon request, copies of records required to be kept by this permit.

8. Inspection and Entry. (40 CFR 270.30(i))

The Permittee shall allow the Regional Administrator, or an authorized representative, upon the presentation of credentials and other documents as may be required by law to:

- a. Enter at reasonable times upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit:
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- d. Sample or monitor, at reasonable times, for the purposes of assuring permit compliance, or as otherwise authorized by RCRA, any substances or parameters at any location.

9. Monitoring and Recordkeeping. (40 CFR 270.30(j), 270.31, 264.73, and 264.74)

The Permittee shall retain all reports, records, or other documents, required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the reports, records or other documents. These periods may be extended by request of the Regional Administrator at any time and are automatically extended during the course of any unresolved enforcement action regarding this facility.

10. Reporting Planned Changes. (40 CFR 270.30(1)(1))

The Permittee shall give notice to the Regional Administrator of any planned physical alterations or additions to the permitted facility, as soon as possible, and at least 30 days before construction of such alteration or addition is commenced.

11. Anticipated Noncompliance. (40 CFR 270.30(1)(2))

The Permittee shall give advance notice to the Regional Administrator of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements. Such notice does not constitute a waiver of the Permittee's duty to comply with permit requirements.

12. <u>Transfer of Permits</u>. (40 CFR 270.30(1)(3), 270.40(a), and 264.12(c))

This permit may be transferred by the Permittee to a new owner or operator only after providing notice to the Regional Administrator and only if the permit is modified, or revoked and reissued, pursuant to 40 CFR 270.40(b), 270.41(b)(2), or 270.42(a). Before transferring ownership or operation of the facility during its operating life, the Permittee shall notify the new owner or operator in writing of the requirements of 40 CFR Parts 264, 268, and 270 (including all applicable corrective action requirements), and shall provide a copy of the RCRA permit to the new owner or operator.

13. <u>Compliance Schedules</u>. (40 CFR 270.30(1)(5) and 270.33)

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted to the Regional Administrator no later than 14 days following each scheduled date.

14. <u>Twenty-four Hour Reporting</u>. (40 CFR 270.30(1)(6) and 270.33)

The Permittee shall report to the Regional Administrator any noncompliance with this permit which may endanger human health or the environment. Any such information shall be reported orally within 24 hours from the time the Permittee becomes aware of the circumstances. This report shall include the following:

- a. Information concerning the release of any hazardous waste which may endanger public drinking water supplies; and
- b. Information concerning the release or discharge of any hazardous waste, or of a fire or explosion at the facility, which could threaten the environment or human health outside the facility. The description of the occurrence and its cause shall include:
 - (1) Name, address, and telephone number of the owner or operator;
 - (2) Name, address, and telephone number of the facility;
 - (3) Date, time, and type of incident;
 - (4) Name and quantity of material(s) involved;
 - (5) The extent of injuries, if any;
 - (6) An assessment of actual or potential hazard to the environment and human health outside the facility, where this is applicable; and
 - (7) Estimated quantity and disposition of recovered material that resulted from the incident.

A written submission shall also be provided within 5 days of the time the Permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period(s) of noncompliance (including exact dates and times); steps taken to minimize impact on the environment; whether the noncompliance has been corrected, and if not, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate and prevent recurrence of the noncompliance. The Permittee need not comply with the 5-day written notice requirement if the Regional Administrator waives the requirement. Upon waiver of the 5-day requirement, the Permittee shall submit a written report within 15 days of the time the Permittee becomes aware of the circumstances.

15. Other Noncompliance. (40 CFR 270.30(1)(10))

The Permittee shall report all other instances of noncompliance not otherwise required to be reported above within 15 days of when the Permittee becomes aware of the noncompliance. The reports shall contain the information listed in Condition I.D.14.

16. Other Information. (40 CFR 270.30(1)(11))

Whenever the Permittee becomes aware that it failed to submit any relevant facts, or submitted incorrect information to the Regional Administrator in the permit application or in any reports, records, or other documentation provided to the Regional Administrator, the Permittee shall promptly submit such facts or information.

17. Submittal of Reports or Other Information. (40 CFR 270.30(1)(7), (8), and (9), and 270.31)

All reports or other information required to be submitted pursuant to this permit shall be sent to:

RCRA Permitting Branch, HRP-8J Waste Management Division U.S. EPA, Region 5 77 West Jackson Boulevard Chicago, Illinois 60604-3590

Attention: Illinois Section

- 18. All other applicable requirements contained in RCRA, <u>as amended</u>, and in 40 CFR 270.30 not set forth herein are hereby fully incorporated in this permit.
- E. <u>SIGNATORY REQUIREMENT</u> (40 CFR 270.30(k))

All reports or other information submitted to or requested by the Regional Administrator, his designee, or authorized representative, shall be signed and certified as required by 40 CFR 270.11.

F. <u>CONFIDENTIAL INFORMATION</u>

In accordance with 40 CFR 270.12 and 40 CFR Part 2, Subpart B, any information submitted to the U.S. EPA pursuant to this permit may be claimed as confidential by the submitter. Any such claim must be asserted at the time of submission in the manner prescribed on the application form or instructions, or, in the case of other submissions, by marking the words "Confidential Business Information" on each page containing such information. If no claim is made at time of submission, the U.S. EPA may make the information available to the public without further notice. If a claim is

asserted, the information will be treated in accordance with the procedures in 40 CFR Part 2.

G. DOCUMENTS TO BE MAINTAINED AT THE FACILITY

The Permittee shall maintain at the facility, until closure is completed and certified by an independent registered professional engineer, all items required by 40 CFR 264.73, including the following documents and all amendments, revisions, and modifications to these documents:

- 1. Waste Analysis Plan, as required by 40 CFR 264.13 and this permit;
- 2. Operating Record, as required by 40 CFR 264.73 and this permit;
- 3. Notifications from generators accompanying each incoming shipment of wastes subject to 40 CFR Part 268, Subtitle C, that specify treatment standards, as required by 40 CFR 264.73, 268.7, and this permit; and
- Records regarding closed-vent systems and control devices and/or equipment leaks as required by 40 CFR 264.1035, 264.1064, and 264.73, and Condition IV.C. of this permit.

II. LAND DISPOSAL REQUIREMENTS

A. GENERAL CONDITIONS

- 1. The Permittee shall comply with all the applicable self-implementing requirements of 40 CFR Part 268 and all applicable land disposal requirements which become effective by statute (Section 3004 of RCRA).
- 2. A mixture of any restricted waste with nonrestricted waste(s) is a restricted waste under 40 CFR Part 268.
- 3. The Permittee shall not in any way dilute a restricted waste or the residual from treatment of a restricted waste as a substitute for adequate treatment to achieve compliance with 40 CFR Part 268, Subpart D, to circumvent the effective date of a prohibition in 40 CFR Part 268, Subpart C, to otherwise avoid a prohibition in 40 CFR Part 268, Subpart C, or to circumvent a land disposal prohibition imposed by Section 3004 of RCRA.
- 4. The Permittee shall prepare and maintain a current list of the hazardous waste codes handled by the facility that are identified in 40 CFR 268, Subparts B and C. The list shall include all waste codes handled by the facility, and any associated treatment standards, and shall be updated through the inclusion of new treatment standards, as promulgated or amended. This list shall be provided to the U.S. EPA representatives, or their designees, upon request.

B. <u>TESTING AND RELATED REQUIREMENTS</u>

- 1. The Permittee must test, in accordance with 40 CFR 268.7(a), any waste generated at the facility, or use knowledge of the waste, to determine if the waste is restricted from land disposal.
- 2. For restricted wastes with treatment standards expressed as concentrations in the waste extract, as specified in 40 CFR 268.41, the Permittee shall test the wastes or waste treatment residues, or extracts of such residues developed using the test methods described in Appendix II of 40 CFR Part 261 (Toxicity Characteristic Leaching Procedure, or TCLP) to assure that the wastes or waste treatment residues or extracts meet the applicable treatment standards of 40 CFR Part 268, Subpart D. Such testing shall be performed as required by 40 CFR 264.13.
- 3. A restricted waste for which a treatment technology is specified under 40 CFR 268.42(a) may be land disposed after it is treated using that specified technology or an equivalent treatment method approved by the Administrator under the procedures set forth in 40 CFR 268.42(b).
- 4. For restricted wastes with treatment standards expressed as concentrations in the waste, as specified in 40 CFR 268.43, the Permittee shall test the wastes or waste treatment residues (not extracts of such residues) to assure that the wastes or waste treatment residues meet the applicable treatment standards of 40 CFR Part 268, Subpart D. Such testing shall be performed as required by 40 CFR 264.13.
- 5. The Permittee shall comply with all the applicable notification, certification, and recordkeeping requirements described in 40 CFR 268.7(a) and (b).

C. STORAGE PROHIBITIONS

- The Permittee shall comply with all the applicable prohibitions on storage of restricted wastes specified in 40 CFR Part 268, Subpart E.
- 2. Except as otherwise provided in 40 CFR 268.50, the Permittee may store restricted wastes in tanks and containers solely for the purpose of the accumulation of such quantities of hazardous wastes as necessary to facilitate proper recovery, treatment, or disposal provided that:
 - a. Each container is clearly marked to identify its contents and the date each period of accumulation begins; and
 - b. Each tank is clearly marked with a description of its contents, the quantity of each hazardous waste received, and the date each period of accumulation begins, or such information for each tank is recorded and maintained in the operating record at that facility.

- 3. The Permittee may store restricted wastes for up to 1 year unless the U.S. EPA or its authorized agent can demonstrate that such storage was not solely for the purpose of accumulating such quantities of hazardous waste as are necessary to facilitate proper recovery, treatment or disposal.
- 4. The Permittee may store restricted wastes beyond 1 year; however, the Permittee bears the burden of proving that such storage was solely for the purpose of accumulating such quantities of hazardous waste as are necessary to facilitate proper recovery, treatment or disposal.
- 5. The Permittee shall not store any liquid hazardous waste containing polychlorinated biphenyls (PCBs) at concentrations greater than or equal to 50 ppm unless the waste is stored in a storage facility that meets the requirements of 40 CFR 761.65(b). This waste must be removed from storage and treated or disposed as required by 40 CFR Part 268 within 1 year of the date when such wastes are first put into storage. Condition II.C.4. above, that allows storage for over 1 year with specified demonstration, does not apply to PCB wastes prohibited under 40 CFR 268.32.

III. TOXICITY CHARACTERISTIC

A. WASTE CHARACTERIZATION

The Permittee must use the Toxicity Characteristic Leaching Procedure (TCLP) (Appendix II of 40 CFR Part 261), or use knowledge of the waste to determine whether a waste exhibits the characteristic of toxicity, as defined in 40 CFR 261.24. Use of the TCLP does not exempt the Permittee from also using the Extraction Procedure (EP) toxicity test if required by the State permit conditions.

IV. AIR EMISSION STANDARDS

A. PROCESS VENTS

The Permittee shall comply with all applicable requirements of 40 CFR Part 264, Subpart AA, regarding air emission standards for process vents.

B. EQUIPMENT LEAKS

The Permittee shall comply with all applicable requirements of 40 CFR Part 264, Subpart BB, regarding air emission standards for equipment leaks.

C. RECORDKEEPING

The Permittee shall comply with all applicable recordkeeping and reporting requirements described in 40 CFR 264.1035, 264.1036, 264.1064. and 264.1065.

D. NOTIFICATION OF REGULATED ACTIVITY

The Permittee shall notify the Regional Administrator of any waste management units which become subject to the requirements of 40 CFR Part 264, Subparts AA and BB, within 30 days of startup of the regulated activity.

E. DUTY TO COMPLY WITH FUTURE REQUIREMENTS

The Permittee shall comply with all self-implementing provisions of any future air regulations promulgated under the provisions of Section 3004(n) of RCRA, as amended by HSWA.

V. SCHEDULE OF COMPLIANCE

Air Emission Regulations

Notification of waste management units subject to the requirements of 40 CFR Part 264, Subparts AA and BB.

Due Date

30 days after startup of the activity.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5 77 WEST JACKSON BOULEVARD CHICAGO, IL 60604-3590

JUN 28 1993

REPLY TO THE ATTENTION OF:

HRP-8J

Lawrence W. Eastep, P.E.
Manager, Permit Section
Division of Land Pollution Control
Illinois Environmental Protection Agency
2200 Churchill Road
P.O. Box 19276
Springfield, Illinois 62706-9276

Re: Amoco Oil Company Wood River Main Plant, ILD 980 700 967

Dear Mr. Eastep:

Copies of the draft Federal permit for Amoco Oil Company Wood River Main Plant; the Statement of Basis; and the Index to the Administrative Record for the draft Federal Permit are enclosed. All documents in the Administrative Record for the draft Federal permit should also be included in the Administrative Record for the draft State permit and available for the public to view at your Springfield office.

If you need copies of any of the documents identified in the index, or have any other questions, please contact Todd Gmitro, at (312) 886-5909, before the start of the comment period.

incerely.

George J. Hamper, Chi

Illinois Section

RCRA Permitting Branch

Enclosures

RCRA-DRAFT PERMIT SIGN-OFT

BACKGROUND

/0-	ITY NAME AMOCO OIL COMPANY MAIN PLANT ner/Operator)	=
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X	Draft Permit_w/Attachments Draft Public Notice, TEPA Fact Sheet/Statement of Basis Facility Letter 10 TEPA Administrative Record Indes Administrative Record Other	
<u>APPLI</u>	CABLE PERMIT CONDITIONS	
X	Land Disposal Restrictions Toxicity Characteristic Waste Minimization Corrective Action Air Emissions Other	_
CONCU	IRRENCES INITIALS DATE	
1.	PERMIT WRITER Name: Jodd Gmitro TG 6-1	7-93
2.		7-93
3.	SECTION CHIEF Jefor G. Hamper 6-3	11-93
4.	TECHNICAL EXPERT (if applicable)	
5.	RPB SECRETARY (logged only) MS 6/2	493
	If U.S. EPA will be public noticing the draft permit, the package must PMB for sign-off. Please cross out if not applicable:	go through
	RDS CHIEF	
6.	ASST. REG. COUNSEL (ORC) Name:	
7.	PERMIT COORDINATOR (ORC)	
8.	SWERB SECTION CHIEF (ORC)	
9.	RPB SECRETARY (6/28)	193 1
10.	RPB CHIEF	93
11.	OR SECRETARY 6/200	2
12.	ASSOCIATE DIV. DIRECTOR, OR	<u>8</u>
REVI:	SED 3/92	.

HEALTH & SAFETY

LEDERAL OFFICE BUILDING, 77 WEST JACKSON BOULEVARD

Fire And Emergency Safety Advancements

Increased Safety Features

As the principle tenant in the new Federal Office Building, the EPA was entrusted with developing the facility's Occupant Emergency Plan to be followed by all tenants. Instructions within this plan incorporated all of the unique fire safety features of the building's state-of-the-art fire safety system, as well as the procedures a building occupant would follow if an emergency occurred.

"ALL CLEAR" message from the public address system. Tenants would follow all instructions until receiving an will alert the hearing impaired of an emergency situation. emergency activated strobe lights located on each floor ation procedures to all tenants. Moreover, the addition of address system will be announcing appropriate evacudanger.) In the meantime, the building's improved public (Also, rely on these phones in the event of personal the individual directly to the FPS Emergency Center. receiver of one of these red Emergency Phones will patch Phones located in every stairwell. Simply lifting the calling on either a deak phone or one of the red Emergency ics of the situation to the Federal Protective Service (FPS), every floor. Next, the individual would report the specifons, conspicuously placed red fire alarm boxes located on Upon discovering a fire, one would pull one of the numer-

Additional safety features include:

- Garage is equipped with numerous
 distress alarms" for personal safety
- 24 Hour access to the Federal Police Department
 24 Hour access to the Federal Police Department
- · Kound-the-clock security guards on site
- Facility parameter is monitored by closed
- State-of-the-art security alarm system

Indoor Air Quality

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chased for the new facility. that the "lowest emitting" finishes and furniture were puran extensive materials review was performed to ensure order to ensure employee health and comfort. In addition, the heating, air conditioning, and ventilation systems in the building. Beta Associates, a PHS contractor, reviewed Service to conduct Indoor Air Quality Analysis Studies of gion 5, retained the services of the U.S. Public Health located at 77 West Jackson Boulevard, the U.S. EPA, Rethe early planning stages of the Federal Office Building is often referred to as "sick building syndrome." During to give building occupants various illness symptoms. This nants, even in very low concentrations, have been known tential to emit indoor air contaminants. These contamiishing and furnishing of occupied buildings have the po-The various construction practices associated with the fin-

Sampling was conducted of various contaminants of potential concern, including Volatile Organic Compounds or VOCs. VOCs will "off-gas" from carpeting, carpet facility are reported to be water based latex. VOC "off-facility are reported to be water based latex. VOC "off-facility are reported to be water based latex. WOC "off-facility are reported to be water based latex. When furniture, etc., typically peak within 48 hours after installation and level off after approximately one week. When lation and level off after approximately one week. When lation and level off after approximately one week. When lation and level off after approximately one week. When lation and level off after approximately one week. When lation and level off after approximately one week. When lation and level off after approximately one week.

In addition, sampling was conducted for total VOCs, total aldehydes, specific VOCs, formaldehyde, asbestos, and total particulates. Background sampling was conducted, to be followed by a period of fresh air flushing throughbefore the building is occupied, sampling will be performed again. Acceptance criteria for for each parameter formed again. Acceptance criteria for for each parameter asmpled was stringent. In all cases, acceptance criteria was below recommended standards or guidelines.

May, 1993 LPC No. 1191150001 ILD980700967 RCRA Log No. 147 Page 1 of 5

FACT SHEET
RCRA HAZARDOUS WASTE PERMIT
Amoco Oil Company - Main Plant
Wood River, Illinois
ILD980700967
STATE ID #1191150001

This fact sheet has been prepared pursuant to the requirements of Title 35 Illinois Administrative Code (35 IAC) Section 705.143. The fact sheet is intended to be a brief summary of the principal facts and significant factual, legal, methodological, and policy questions considered in preparing a draft RCRA permit. This permit will allow Amoco Main Plant to provide post-closure care for two hazardous waste surface impoundments. Pursuant to 35 IAC 705.143(a), this fact sheet is sent to the applicant and to any other person who requests it.

I. INTRODUCTION

The draft permit for Amoco-Main Plant contains all of the standard conditions required by 35 IAC Parts 702, 703, and 724; and the applicable conditions of 35 IAC Part 724 post-closure care of a hazardous waste landfill and operation of a hazardous waste surface impoundment under delay of closure. Amoco-Main Plant is an existing facility that has been operating under interim status since November of 1980.

II. DESCRIPTION OF FACILITY

A. General

The Amoco Wood River Main Plant occupies approximately 600 acres near the Mississippi River in the City of Wood River, Madison County, Illinois. The Plant property was first developed in 1907 with construction of the oil refinery. The refinery began operations in 1908. During peak operations, the refinery employed over 600 people and processed 100,000 barrels of crude oil per day into gasoline, heating oil, diesel, jet fuels, kerosene, polybutylene, asphalts, and other commercial petroleum products. The refinery ceased operations in June 1981. Dismantling of the refinery equipment continued from 1981 until completion in 1991.

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Currently, Amoco Petroleum Additives Company (APAC) and Amoco Oil Marketing (Marketing) manage the existing operating facilities at the plant under lease agreements with Amoco Oil Company. APAC manufactures fuel additives and lubrication oil additives from raw products. Marketing operates a terminal for the receipt and distribution of gasoline, diesel, and other distillate fuels such as furnace and heating oils.

B. <u>Site Description</u>

The Amoco-Main Plant facility is located at 301 Evans Avenue on the southwest side of Wood River, Madison County, Illinois and northwest of Hartford, Illinois.

III. HAZARDOUS WASTE MANAGEMENT ACTIVITIES

A. <u>Description of Units</u>

1. Post Closure

Amoco will be providing post-closure care for two hazardous waste surface impoundments. These surface impoundments are identified by Amoco as the South Flare Pit (SFP) and the North Cell of Spray Pond #1 (NC-SP1). The SFP measures approximately 75 feet by 25 feet and consists of a flatbed rail car placed below grade to hold waste material. Wastes managed in the SFP included calcium sulfonate, magnesium sulfonate, zinc phosphate phenates, high sulfur acids, high phosphate acids, SAE 5W oil, and filter cake. It was identified as a hazardous waste management unit (HWMU) because phosphorous pentasulfide (U189) was placed in the unit.

NC-SPl covers approximately 3.5 acres on the north edge of the cooling pond complex. The unit is surrounded by a dike made of soil borrowed from the floor of the unit, which is made up of approximately 10 feet of in-situ clay. This unit receives an influent mixture of cooling water and sour water from the Fluidized Catalytic Unit. NC-SPl was identified as a HWMU because it received reactive sulfide material (D003).

35 IAC 703.121(b) requires owners and operators of surface impoundment units that received wastes after July 26, 1982 or certified closure in accordance with 35 IAC 725.215 after January 26, 1983, to obtain post-closure permits, unless they demonstrate closure by removal as provided under 35 IAC 703.159 and 160. Since both units went through RCRA closure and were certified closed in accordance with 35 IAC 725.215 in 1986, post-closure care in accordance with this permit is required.

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Post-closure permit conditions deal with monitoring, maintaining, and recordkeeping of the hazardous waste management units in accordance with the provisions of the post-closure care plans. Section I contains conditions specific to post-closure and implements the regulatory requirements of 35 IAC 724, Subpart G.

B. Groundwater Monitoring Program

The Amoco Main Plant facility has two separate groundwater monitoring programs. The first of which is a Detection Monitoring program for the post-closure monitoring of the North Cell of Spray Pond #1 and the South Flare Pit. This monitoring program consists of 14 wells, monitoring both a shallow and deep aquifer. The wells will be sampled quarterly for constituents expected to be found in refinery waste.

The second monitoring program is for an interim corrective action program to remove refinery product and dissolved constituents from the groundwater. This program consists of 131 monitoring and pumping wells. Twenty-one wells will be used to maintain a groundwater gradient toward the interior of the facility, and recover refinery product from above the water table. The monitoiring wells will be sampled on a quarterly and semi-annual basis for constituents expected to be found in refinery waste. Upon completion of the RCRA Facility Investigation/Corrective Measures Study, the interim corrective action program will be modified to include the Solid Waste Management Units identified in the RCRA Facility Investigation.

C. STANDARD PERMIT CONDITIONS

Standard Permit Conditions 1 to 68 are regulatory requirements of 35 IAC, Parts 702, 703 and 724. These conditions are of a general nature and are applicable to all Hazardous Waste Management facilities regulated pursuant to an IEPA RCRA permit. These conditions include the effectiveness of the permit, permit actions, severability, permit expiration, monitoring and retention of records, transfer of permits, and compliance schedules.

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IV. CONSIDERED PERMIT ACTIONS OTHER THAN RCRA

A. Air

The air emissions from a hazardous waste management facility are regulated under RCRA, the Clean Air Act (CAA), the Illinois Environmental Protection Act and State regulations at Title 35: Environmental Protection, Subtitle B: Air Pollution. Under these regulations, it is required to obtain a permit to install or operate any process which is, or may be, a source of air pollutants. Amoco has proper permits for sources of air emissions.

B. Water

A discharge of any waste waters from a hazardous waste management facility into the waters of the State, is required to have a National Pollutant Discharge Elimination System (NPDES) permit, issued by the Agency under Section 39(b) of the Environmental Protection Act. Amoco has proper discharge permits.

V. PROCEDURES FOR REACHING A FINAL DECISION

Pursuant to 35 IAC 705.162(a)(2), the public is given forty-five (45) days to review the application and comment on the draft Permit conditions prior to IEPA taking any final permitting action on the application for this RCRA Hazardous Waste Management Permit. The comment period will begin on June 30, 1993, the date of publication of the public notice in a major local newspaper of general circulation. The comment period will end on August 16, 1993. When the Agency makes its final Permit decision, notice will be given to the applicant and each person who has submitted written comments or requested notice of the final Permit decision. The Permit will become effective thirty-five (35) days after service of notice of the decision or at a later date if stated in the Permit. In addition, copies of the draft permit and fact sheet are available for review at the Wood River Public Library, 326 East Ferguson Street, Wood River, Illinois 62095.

Any interested person may submit written comments on the draft permit, or request a public hearing, at the following address:

Illinois Environmental Protection Agency Government and Community Affairs Section, Director's Office 2200 Churchill Road Post Office Box 19276 Springfield, Illinois 62794-9276

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The administrative record is open for public inspection at the IEPA Springfield headquarters from 8:30 a.m. to 5:00 p.m., Monday through Friday. The administrative record contains the Permit application, fact sheet, and other supporting documents and correspondence submitted to the IEPA. Inspections of the administrative record must be scheduled in advance by contacting the Public Notice Clerk at the above address.

In response to requests received during the comment period or at the discretion of the IEPA, a public hearing may be held to clarify one or more issues concerning the Permit application. A request for a public hearing must be in writing and shall state the nature of the issues proposed to be raised in the hearing. Public notice will be issued forty-five (45) days before any public hearing. If a hearing has been scheduled with the public notice, then further requests are not necessary.

For further information, please contact Mara McGinnis, Director's Office, Illinois Environmental Protection Agency at 2200 Churchill Road, Post Office Box 19276, Springfield, Illinois 62794-9276 or by telephone at 217/524-3300.

HRP-8J

Lawrence W. Eastep, P.E.
Manager, Permit Section
Division of Land Pollution Control
Illinois Environmental Protection Agency
2200 Churchill Road
P.O. Box 19276
Springfield, Illinois 62706-9276

Re: Amoco Oil Company Wood River Main Plant, ILD 980 700 967

Dear Mr. Eastep:

Copies of the draft Federal permit for Amoco Oil Company Wood River Main Plant; the Statement of Basis; and the Index to the Administrative Record for the draft Federal Permit are enclosed. All documents in the Administrative Record for the draft Federal permit should also be included in the Administrative Record for the draft State permit and available for the public to view at your Springfield office.

If you need copies of any of the documents identified in the index, or have any other questions, please contact Todd Gmitro, at (312) 886-5909, before the start of the comment period.

incerely,

George J. Hamber, Chief

Illinois Section

RCRA Permitting Branch

Enclosures

16 6-17-93

STATEMENT OF BASIS FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY (U.S. EPA) DRAFT RESOURCE CONSERVATION AND RECOVERY ACT (RCRA) PERMIT FOR AMOCO OIL COMPANY WOOD RIVER MAIN PLANT WOOD RIVER, ILLINOIS ILD 980 700 967

RCRA PERMITS

In 1976, the Resource Conservation and Recovery Act (RCRA) amended the Solid Waste Disposal Act, 42 U.S.C. §6901, et seq., to require certain facilities engaged in treating, storing, or disposing of hazardous waste to have a permit for such activities. In 1984, the Solid Waste Disposal Act was again amended by the Hazardous and Solid Waste Amendments (HSWA). The 1984 legislation contains additional permitting requirements and also provides authority to the U.S. EPA to establish permit conditions for hazardous waste facilities beyond the scope of existing regulations if necessary to protect human health and the environment.

On January 31, 1986, the State of Illinois received final authorization, pursuant to Section 3006 of RCRA, 42 U.S.C. §6926, and 40 CFR Part 271, to administer the pre-HSWA RCRA hazardous waste program. The State has subsequently been authorized to also administer individual provisions of HSWA. Because the State of Illinois has not yet received authorization to administer all of the HSWA requirements, additional permit conditions must be issued by the U.S. EPA to address the remaining HSWA requirements. These conditions are contained in the U.S. EPA permit, which together with the State of Illinois permit constitute the RCRA permit.

U.S. EPA PERMIT DECISION PROCEDURES

Section 7004(b) of RCRA, 42 U.S.C. §6974, and 40 CFR 124.10 and 124.11 require that the public be given a 45-day comment period for each draft permit issued under RCRA. The comment period begins on the day after publication of the public notice in a major local newspaper of general circulation. Any person interested in submitting comments on the draft permit must do so within this 45-day comment period.

As specified in 40 CFR 124.11 and 124.12, a public hearing will be held whenever a request for a public hearing is received during the 45-day public comment period. The request must be in writing and must state the nature of the issues proposed to be raised in the hearing. An announcement will be published in the legal notice section of a major or local newspaper, identifying the date, time, and location of the hearing. Any person may submit oral or written statements and data concerning the draft permit at the hearing. The public comment period is extended to at least the close of the public hearing. All comments will be considered in making the final permit decision.

As specified in 40 CFR 124.15 and 124.17, after the close of the public comment period, the U.S. EPA will issue a final permit decision. Each person who has submitted written comments, given oral testimony at the hearing, or requested notice of the final permit decision shall be notified of the U.S. EPA's decision. This notice will include references to procedures for appealing the decision, and will contain the U.S. EPA's response to all significant comments to the draft permit received from the public. The notice will also specify which provisions, if any, of the draft permit have been changed in the final permit and the reasons for the changes. Any new issues raised or submissions received during the public comment period will be entered into the administrative record.

Because the RCRA draft permit is being issued jointly by the State of Illinois and the U.S. EPA, and in order to consolidate the processing of information submitted by the public, all comments regarding the draft permit and requests for a public hearing should be submitted in writing to:

Illinois Environmental Protection Agency Government and Community Affairs 5 Attn: RCRA Public Involvement Coordinator 2200 Churchill Road P.O. Box 19276 Springfield, Illinois 62794-9276

The U.S. EPA contact for this permit is Todd Gmitro, who may be reached at (312) 886-5909.

FACILITY DESCRIPTION

Amoco Oil Company Wood River Main Plant is located in the City of Wood River, in Madison County, Illinois. The site occupies approximately 600 acres and is located in the American Bottoms floodplain valley of the Mississippi River. The plant is approximately one-half mile east of the Mississippi River. Communities located in the vicinity of the facility include Hartford, Roxana, and South Roxana. Amoco Oil Company operated a petroleum refinery here from 1908 until 1981. From 1981 until 1991 much of the refinery equipment at the site was dismantled. Currently, Amoco Petroleum Additives Company (APAC) manufactures fuel additives and lubrication oil additives; and Amoco Oil Marketing receives and distributes gasoline, diesel, and other fuels at the facility. Shell Oil Company, Marathon Oil Company, and Clark Oil Company also operate petroleum refining or storage facilities in this area.

The post-closure RCRA permit is for two disposal units at the site. The South Flare Pit (SFP) is a wastepile and the North Cell Spray Pond #1 (NC-SP1) is a surface impoundment. Influent to the NC-SP1 was a mixture of cooling water and sour water from a Fluidized Catalytic Unit (FCU). The SFP is located adjacent to and southwest of the NC-SP1 and was used to impound waste oils, sludges, and water. Phosphorous pentasulfide (listed U189 hazardous waste) was also placed in the SFP. Both these units were closed in 1986. This RCRA permit will specify post-closure care conditions for these two units, which shall apply for the next 30 years.

Since the State of Illinois has authorization for post-closure permits, most of the operating standards and regulatory requirements are contained in the State portion of the RCRA permit. Therefore, further details may be found in the State of Illinois draft permit and in the permit application.

BRIEF SUMMARY OF PERMIT CONDITIONS

This section provides a brief summary of the draft permit conditions. All citations in the Basis refer to the regulations codified in Title 40 of the Code of Federal Regulations (40 CFR).

Permit condition	Subject	<u>Basis</u>
I.A.	Effect of Permit	270.4 270.30(g)
I.B.	Permit Actions	270.30(f)
I.C.	Severability	124.16
I.D.1.	Duty to Comply	270.30(a)
I.D.2.	Duty to Reapply	270.30(b) 270.10(h)
I.D.3.	Permit Expiration	270.13 270.14 270.50 270.51
I.D.4.	Need to Halt or Reduce Activity Not a Defense	270.30(c)
I.D.5.	Duty to Mitigate	270.30(d)
I.D.6.	Proper Operation and Maintenance	270.30(e)
I.D.7.	Duty to Provide Information	270.30(h) 264.74
I.D.8.	Inspection and Entry	270.30(i)
I.D.9.	Monitoring and Recordkeeping	270.30(j) 270.31 264.73 264.74
I.D.10.	Reporting Planned Changes	270.30(1)(1)

I.D.11.	Anticipated Noncompliance	270.30(1)(2)
I.D.12.	Transfer of Permits	270.30(1)(3) 270.40(a) 264.12(c)
I.D.13.	Compliance Schedules	270.30(1)(5) 270.33
I.D.14.	Twenty-four Hour Reporting	270.30(1)(6) 270.33
I.D.15.	Other Noncompliance	270.30(1)(10)
I.D.16.	Other Information	270.30(1)(11)
I.D.17.	Submittal of Reports or Other Information	270.30(1)(7),(8),(9) 270.31
I.D.18.	Other Requirements	270.30
I.E.	Signatory Requirement	270.30(k)
I.F.	Confidential Information	270.12
I.G.	Documents to be Maintained at the Facility	264.13 264.73 268.7
II.A.	Land Disposal Requirements: General Conditions	268.1 268.3 268 Subparts B and C
II.B.	Testing and Related Requirements	268.7 268 Subparts C and D 264.13
II.C.	Storage Prohibitions	268 Subpart E 268.32 761.65(b)
III.A.	Toxicity Characteristic: Waste Characterization	261.24 261 Appendix II
IV.A.	Air Emission Standards: Process Vents	264 Subpart AA
IV.B.	Equipment Leaks	264 Subpart BB

IV.C.	Recordkeeping	264.1035 264.1036 264.1064 264.1065
IV.D.	Notification of Regulated Activity	270.30(1)(1)
IV.E.	Duty to Comply with Future Requirements	270.30(a)
٧.	Schedule of Compliance	270.30(1)(5) 270.33

Section I. of the permit contains standard conditions which are part of every RCRA permit. These conditions address general requirements related to the implementation of the permit.

Section II. addresses the land disposal prohibitions for hazardous wastes mandated by HSWA. The provisions in this section specify the treatment standards that RCRA hazardous waste must meet prior to any land disposal. The provisions in this section also require the Permittee to comply with the applicable testing and storage requirements for any wastes which are sent off site for treatment and/or disposal.

Section III. requires the Permittee to determine whether or not any of the solid wastes which it manages or generates exhibit the Toxicity Characteristic (TC) identified in 40 CFR 261.24. HSWA required the U.S. EPA to revise the original Extraction Procedure Toxicity Characteristic so as to identify additional hazardous waste characteristics. These provisions require the Permittee to utilize the Toxicity Characteristic Leaching Procedure in lieu of the original Extraction Procedure when necessary to make a determination as to whether a solid waste exhibits the TC.

Section IV. requires the Permittee to comply with recent requirements regarding air emissions from vents on certain process units and from equipment leaks related to these process units and hazardous waste tank operations. The facility presently does not have any units to which these regulations apply. However, should the facility utilize such units in the future, it would have to comply with these HSWA-required air emission regulations.

Section V. sets a compliance schedule for the facility to notify the U.S. EPA should it utilize any units subject to the air emission regulations identified in Section IV.

Hand carried by grag Wurtz
1/1/87. July

July 2, 1987

Draft List of Amoco Wood River Facility Solid Waste Management Units

Note: List excludes those units which are currently RCRA regulated units and those which have been closed as RCRA regulated units

Riverfront

- Butene Polymerization Waste Area (Waste pile)
- 2. Closed Capped and Slurry-walled Landfill (Landfill)
- Nonhazardous Waste Landfill (RCRA Closure Related) (Landfill)
- 4. Wastewater Surge Pond (Surface Impoundment)

Former Refinery

- Leaded Tank Bottom Disposal (Tank 176, 105, 106 dike areas, dike area east of 176 Tank dike area) (Waste pile)
- 4
- Northeast Sand Pit (dike area north of Tank 227 dike area) (Waste pile)
- (2)

- Former Tank 228 dike area (Waste pile)
- 4. Tank 246 dike area (Waste pile)
- 5. Area south of Tank 297 and across the road east of Tanks 299 and 295 (Waste pile) See CERCLA report 3/3/86
- 6. Area south of and across road from Tank 249 (Land Farm) from Call Sweutes
- Area north of road in far southeast corner of facility / (Waste pile/Surface Impoundment)

- 8. Area north of Tank 296 dike (Waste pile)
- Backfilled Former API separator (Landfill)
- 10. Closed Additive Waste Pit
 (Landfill)
- 11. DAP Spent Filter Clay Transfer Area (Transfer Station)
- 12. DAP Spent Filter Clay Storage Area (Roll-off box west of No. 3
 Spray Pond)
 (Transfer Station)